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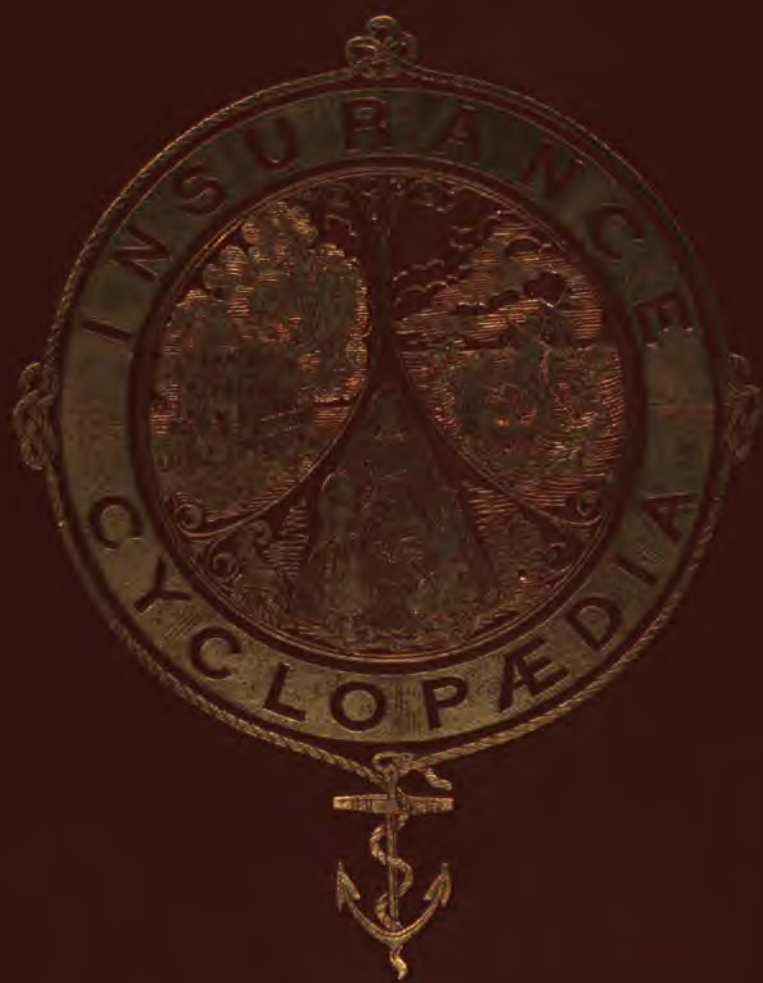
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THE
INSURANCE CYCLOPÆDIA:

BEING

A DICTIONARY

OF THE DEFINITION OF TERMS USED IN CONNEXION WITH THE THEORY
AND PRACTICE OF INSURANCE IN ALL ITS BRANCHES:

A BIOGRAPHICAL SUMMARY

OF THE LIVES OF ALL THOSE WHO HAVE CONTRIBUTED TO THE
DEVELOPMENT AND IMPROVEMENT OF THE THEORY AND PRACTICE
OF INSURANCE: WHETHER AS AUTHOR, MANAGER, ACTUARY,
SECRETARY, AGENCY SUPERINTENDENT, OR OTHERWISE.

A BIBLIOGRAPHICAL REPERTORY

OF ALL WORKS WRITTEN UPON THE SUBJECT OF INSURANCE AND ITS
ASSOCIATED SCIENCES:

AN HISTORICAL TREASURY

OF EVENTS AND CIRCUMSTANCES CONNECTED WITH THE ORIGIN AND
PROGRESS OF INSURANCE, INCLUDING A HISTORY OF ALL KNOWN
OFFICES OF INSURANCE FOUNDED IN GREAT BRITAIN,
FROM THE BEGINNING.

AND ALSO CONTAINING A DETAILED

ACCOUNT OF THE RISE AND PROGRESS OF INSURANCE
IN EUROPE AND IN AMERICA.

AND A

COMPENDIUM OF VITAL STATISTICS.

BY

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VOLUME IV.

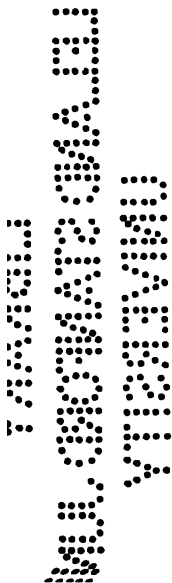
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CHARLES AND EDWIN LAYTON, FLEET STREET.

1876.

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TABLE OF ABBREVIATIONS USED IN THIS WORK;

MANY OF WHICH ARE SPECIALLY ADAPTED TO ITS PAGES :—

A.	Accident Insurance	Int.	Interest
Act.	Actuary	Intro.	Introduction
Act of Parl.	Act of Parliament		
Add.	Addition, additional		
Adv.	Advertisement	L.	Life, Life Insurance
Amalg.	Amalgamation	L.J.	Lord Justice
Ann.	Annual, annum	Lim.	Limited
Ann.rep.	Annual report	Liq.	Liquidator, liquidation, liquidated
Annu.	Annuities, annuity, annuitant	Lond.	London
Ap.	Apprenticeship Insurance		
Art. of Asso.	Articles of Association	M.	Marine, Marine Insurance
Art. of Sett.	Articles of Settlement	Mag.	Magazine
Assu.	Assure, assured, assurance, assurances	Man.	Manager
Assu. Mag.	Assurance Magazine	Mar. Ins.	Marriage Insurance
Asso.	Association	Mort.	Mortality
		Mort. obs.	Mortality observation
		Mut.	Mutual
B.	Birth Insurance		
B. of mort.	Bill of mortality	N. Y.	New York
Bal.	Balance	Non-par.	Non-participating
Bon.	Bonus, bonuses		
Brit.	Britain, British, Britannia	Obs.	Observations
Bus.	Business	Off. Liq.	Official Liquidator
		Off. Man.	Official Manager
C.	Christening Insurance	Ordin.	Ordinance
C.	Cent.	Orig.	Original
C.p.c.	Cent. per cent.		
Cap.	Capital	P.a.	Per annum
Chap.	Chapter	P.c.	Per cent.
Co., Cos.	Company, companies	Pamph.	Pamphlet
Comp. regis.	Complete registration	Para.	Paragraph
Con. Act.	Consulting Actuary	Parl.	Parliament
Consti.	Constitution	Parl. Com.	Parliamentary Committee
Contin.	Contingencies	Parti.	Participation
Corp.	Corporation	Phil. Trans.	Philosophical Transactions.
D. of Sett.	Deed of Settlement	Plt.	Plaintiff
Deft.	Defendant	Pol.	Policy, policies
Div.	Dividend, dividends, division	Pop.	Population
Dol.	Dollar	Prelim.	Preliminary
		Prem.	Premium, premiums
Ed.	Edition, editor	Prob.	Probability, probabilities
Eds.	Editions	Prosp.	Prospectus
Edin.	Edinburgh	Prov. regis.	Provisional registration
Ency. Brit.	Encyclopædia Britannica	Pub.	Published, publisher, publication
Endow.	Endowment, endowments		
E. and W.	England and Wales	R.	Report
Etab.	Established, establishment	Red. prem.	Reduction of premium
Exp.	Experience	Reg.-Gen.	Registrar-General
Expec.	Expectation	Regis.	Registration
		Rep.	Report
F.	Fire, Fire Insurance	Rev.	Reversion
F. So.	Friendly Society		
Fid.	Fidelity guarantee	S.	Service Insurance
Fr.	France	Sec.	Secretary
		So.	Society
G.	Guarantee Insurance	Stat.	Statute
Gl.	Glass Insurance	Stg.	Sterling
Gov.	Government	Subs.	Subscribed, subscribers, subscription
Gt. Brit.	Great Britain		
Guar.	Guarantee	T.	Table
		Trans.	Transfer, transferred, translation
H.	Hail Insurance		
Hist.	History	U. K.	United Kingdom
		U. S.	United States
Incorp.	Incorporation		
Ins.	Insure, insured, insurance, insurances	V. C.	Vice Chancellor
Inst.	Institution, institutions	V. Sta.	Vital Statistics
		Vict.	Victoria

EXPLANATION TO THE READER.

The design of this work is that it shall be, as far as possible, self-interpreting. All technical terms used in its pages are explained in its pages, in their alphabetical order.

The arrangement of subjects is strictly *Alphabetical*.

The arrangement of articles is, as far as possible, *Chronological*. Dates are given whenever possible. Writers on Insurance subjects generally have a great disregard for chronological exactitude.

Words in Small Capitals placed in brackets, as [USURY], mean that the subject will be further treated of under that head.

When Small Capitals are used in the text without the brackets, it signifies that the subject is, or will be, treated as a separate article.

Offices founded in London or books published there, are not individually so designated in the following pages. The rule we have followed is to state all the exceptions. Therefore, where it is not specifically stated *otherwise*, London is to be assumed.

We are especially desirous of noticing all INSURANCE PAMPHLETS. Many of these are privately printed, or only accessible through their authors. Our thanks will be due for any contributions of this description.

A Table of the principal Abbreviations used in the work is given on the preceding page.

THE ENCYCLOPÆDIA OF INSURANCE.

FIRE PROTECTION NOTE.—A form of voucher issued by fire offices, under which they hold protected to an agreed amount goods or merchandize for a certain number of days or hours, pending removal into warehouses, or shipment, or otherwise. [DEPOSIT RECEIPTS.]

FIRE PUMPS.—See HAND ENGINES.

FIRE RAISING.—See ARSON, and FIRES CAUSED WILFULLY.

FIRE RE-INSURANCE.—See RE-INSURANCE, FIRE.

FIRE RE-INSURANCE CORP., LIM.—Founded in 1874, with an authorized cap. of £200,000, in 20,000 shares of £10. First issue 10,000 shares. The main object of the Co. is to undertake and effect with, or take over from any co., so., corp., partnership, or person, by or for the purposes of re-insurance, fire ins. pol., and every description of contract of ins. against loss by fire. The prosp. says :

The field for the operations of a soundly constituted re-ins. co. is practically inexhaustible : for whilst the total number of cos. estab. for the transaction of re-insurance bus. is less than 20, there were in Gt. Brit. and her colonies alone, in the year 1872, more than 100 fire ins. cos. transacting bus., possessing prem. incomes ranging between £10,000 and £1,100,000 p.a. ; on the Continent there were about 150 similar cos. ; and more than 300 in the U.S. These cos. re-insure on an average about *one-sixth* of the bus. they accept ; and their aggregate incomes prob. exceed £60,000,000 stg. p.a.

The remunerative nature of the bus. of carefully managed fire ins. cos. is well known to their shareholders. The Parl. returns made by those of the Brit. Cos. which come under the provisions of the Act of 1870 [Life Assu. Cos. Act], and the official returns of an equal number of Continental and other cos., show that their aggregate ann. prem. income always exceeds by a large amount the sum paid for claims ; and as the bus. of this Corp. is to "take over" or re-insure a portion of the transactions of such cos. (for doing which it will receive from them an ann. prem. income exactly proportionate to the amount of bus. re-insured), it will share proportionately in their profitable working.

A later prosp. said :

The increasing magnitude of ins. transactions, and the need of further facilities for effecting re-insurances, has secured to the Corp. a sound and rapidly augmenting bus. ; no less than 8 cos., some of the oldest connected with the Tariff Asso., having opened accounts with the Corp. during the past quarter ; and arrangements are being made with several others of similar standing.

The prosp. contained a number of statistics regarding fire ins. cos. at home and abroad. Some of these will be noticed under other heads.

The first ann. meeting was held in Feb. 1876, when the prem. income was reported as being £31,000. The guaranteed fund was stated to be £52,000, for which a commission was paid by the Co. A div. of 6 p.c. was declared.

Among the orig. promoters of the Co. were Mr. Josephus Bailey, "Supt. of Agents ;" Mr. Joseph Freeman, "Ins. Manager ;" Mr. F. Richard Harold, "Ins. Manager ;" Mr. Henry Nuthall, "Ins. Agent ;" and Mr. Charles W. Pearce, "Ins. Manager."

Mr. Freeman and Mr. Pearce became the Man. of the Co.

FIRE RISK UNDER MARINE INS. POL.—See SHIPS, INS. OF AGAINST FIRE RISKS.

FIRE SALVAGE CORPS.—See SALVAGE CORPS (*Fire*).

FIRE-SHIPS.—These are used in maritime warfare, sometimes with very destructive effect.

The first use of them by the Brit. Navy is said to have been in the engagement with the Spanish Armada in 1588. In 1585 a fire-ship with torpedo combined was employed to destroy a bridge of boats at Antwerp.

FIRE SHUTTERS.—See FIREPROOF SHUTTERS.

FIRE STATIONS.—Stations where firemen, fire engines, and all necessary appliances for the extinguishment of fires are kept in readiness for service in the particular districts in which they are situated. The number of fire stations in the metropolis has been considerably increased of late years. [FIRE BRIGADES.] [FIRE PROTECTION.]

FIRE SYRINGE.—See FIRE ENGINES—HAND.

FIRE TELEGRAPHS.—Under FIRE CALLS, and FIRE DETECTORS AND INDICATORS, we have given an account of all inventions of this class which we regard as applicable to Fire Extinguishment and Fire Protection generally. We consider the Automatic (Fire) Signal Telegraph to be beyond all question the most complete invention yet known.

FIRE TOWERS.—See FIRE OBSERVATORIES. [FIRE PROTECTION, 1677.]

FIRE TRAPS.—This term is usually applied to buildings so constructed, or adapted to certain occupations, as for instance having lifts, or shafts from the bottom to the top, so placed that, in the event of fire once occurring, any chance of saving the building or stock must be regarded as hopeless from the beginning. Happily, the surveyors to the different fire offices are becoming very vigilant in regard to these. [See FIRE INS., CLASSIFICATION OF RISKS.]

FIRE UNDERWRITERS ; FIRE UNDERWRITING.—The officer of the fire ins. co. whose immediate bus. it is to accept or reject risks is in the U.S. designated the Fire Underwriter. In Europe this designation is little used. The chief officer is styled the man. or sec. The truth is, that the bus. of fire underwriting, in its ordinary practice, is hardly ever carried out as a mere matter of individual underwriting, that is to say, by a subscription of a certain amount, at the foot of a common form of pol., as is the case in marine ins. The custom alike in Europe and the U.S. is to issue a pol. or contract under seal, embodying the conditions of the particular asso. issuing the same. Every fire office, however, has one principal officer, who in effect performs the duty of fire underwriter.

Here is an American outline of the requirements of a modern fire underwriter :

He should be a good judge of character ; something of a physiognomist—though in these days, when brokers so much intervene, there is not much chance to use such knowledge. He should be a house-keeper in theory, and better if he be so in practice ; he should be a cabinet-maker and upholsterer, so far as to judge between a good and a poor article ; a builder, so far as to form estimates of value and damage ; a merchant, in having a general knowledge of most kinds of merchandize and their market values ; a book-keeper and accountant, to examine accounts and statements, and thus properly adjust losses ; and a common-sense lawyer, to look into a variety of contracts and stipulations that may come up in the way of bus., and to understand the law governing the contract of ins. Last, but not least, he is supposed to be governed in part by past experience in making a proper charge of prem. for risks offered ; to judge sometimes on prevailing winds as they might affect risks in certain localities ; to look understandingly upon the internal arrangements and the external surroundings, and to inquire generally into the ordinary means for arresting a fire should it break out.

It takes years of active training to acquire all this varied knowledge.

The *Mutual Fire*, founded in *Manchester* in 1870, presented in a modified degree a revival of the principle of individual fire underwriting. The manager signs under a power on behalf of a number of the leading members.

An art. in the *Ins. Times* of N.Y. Nov. 1872, contained the following :

If any position requires a clear head, quick perception, and firmness, it is the fire underwriter. He should not only know the nature of the risk and its surroundings, but he should know something of the character of the men who are to receive his pol. Have they made a reputation in bus., or are they mere adventurers ? Are they to be found in their bus., exercising a watchful care over the detail, familiar with every plan to be carried out, or do they leave the chief operations and management to salaried agents ? It has been said by some wise pol. maker that the rating of the party insured was more important in their judgment than the rating of the building in which he transacted his bus. There are, at this time, five dry goods' houses in this city, whose aggregate ins. cannot be less than 20,000,000 dol., of whom three have been in bus. more than 45 years, and the other two more than 30 years, yet but one of the number has ever made claim for loss occurring in their place of bus., and that loss did not exceed 1500 dols. ! They are men who watch their bus. closely. *These firms may be exceptions, but they are exceptions on a grand scale, and prove that thorough discipline and care in bus. ought to receive great consideration with the underwriter.*

The *Ins. Times*, returning to the charge in July, 1874, says :

Underwriting, like war, abounds in the element of danger. . . . The underwriter's dangers are incessant and ubiquitous. They lurk in every risk offered for his acceptance. He is constantly at war with the most destructive elements in existence, which are ever awaiting an opportunity to escape control, and whelm his company in disaster. He assumes an aggregate number of risks, which the experience of the past and the nicest calculation show that he may, if they are wisely selected and duly distributed over a wide area, safely undertake to carry ; but if this calculation is not borne out by the maintenance of the correct principles of underwriting, and the exercise of a thoroughly-trained skill and sound judgment in the business, the losses will in experience exceed the estimate at many points, and the safety and success of the co. be made dependent upon guess-work and chance. When the true principles and precepts of underwriting are thus violated, the bus. degenerates into mere gambling, and gambling of a kind in which the co. has so many chances against it, that they seldom fail in the end to effect its ruin.

The *Spectator*, N.Y., of the same year, said :—"The growing complexity of the bus. of F. Ins. is making it necessary that the highest order of talent shall be called to its assistance. Fire underwriting has an affinity with almost everything that goes to make up that entity called civilization. Being a perfect underwriter implies that one understands the principles underlying all kinds of bus. transactions with which ins. has dealings."

During this year it was announced that the City of Baltimore, alone in the U.S., possessed the novelty of an individual fire underwriter—Mr. James C. Wheeden : "Mr. Wheeden was for 25 years a member of the Board of Directors of the *Associated Fireman's Ins. Co.*, and during that period was, with rare exceptions, in daily attendance at the office. He confines himself almost exclusively to dwelling-house risks, of which he makes careful surveys, and as he knows everybody in the eastern section of the city, where he has lived 69 years, he has little to fear from the elements of moral hazard. He has successfully conducted his bus. for more than a year with only one trifling loss.

Having ample means, he is fully prepared to furnish indemnity in case of loss."—*Baltimore Underwriter*.

The Rep. of Mr. Thomas H. Montgomery, the Gen. Agent of the National Board of Fire Underwriters, U.S., presented at the 9th ann. meeting, April, 1875, contains the following important obs. addressed to the members of the local boards of that organization, but equally applicable to underwriters generally:

Earnest men of all professions look beyond their daily battle for existence, and with increased self-culture strive to make their fellow-citizens share the results of their knowledge. If the lawyer seeks to improve the code of his town or state; if the physician rises above the application of his healing art to individual cases, and strives to improve the hygiene of his locality; there is no cogent reason why the underwriter should not look beyond his tariff and his pol., and endeavour his utmost to make his townsmen measurably safe from sweeping fires. It is this professional character which the local underwriters should realize and believe in; and the more this idea can be extended, the more will he be sensible of its dignity and usefulness,—second indeed to none of the learned and leading professions of the land. As the lawyer or the physician have each his recognized code of charges for professional services, but looks beyond this for yearly advances in the knowledge of his profession, so the local underwriter should look upon his tariff only as his approved code of charges, and far beyond this, by reading and study, seek in his individual capacity to advance and enlarge his profession, and cause the community in which he makes his home to feel the advantage of his efforts in the improvement of all municipal regulations bearing on the question of fire hazard in his locality.

The brilliant address of Mr. Edgar A. Hewitt, of the *Chronicle*, N.Y., before the Convention of the Underwriters' Asso. of the South, held at New Orleans, in April, 1876, contained the following apt passages:

Fire underwriting is not, and under existing conditions cannot be, an exact science. It is a perpetual experiment, requiring for its successful conduct the utmost keenness of observation, quickness of apprehension, clearness of judgment and fertility of resource. . . . The fire underwriter is like the sailor making his way in darkness through an untried sea. He has the principles of his bus. to guide him, as the sailor has his compass. His experience is to him like the sailor's observation of the changeful sky and wind and sea. But he has no chart, no map of the liquid desert he is exploring, and frequent soundings must be taken.

For success in fire underwriting theories and traditions will not avail without a close and constant observation of existing facts. The observation must be close, because the facts material to success are difficult of discovery; it must be constant, because those facts are continually changing.

FIRE WALL.—A complete party-wall carried up from the foundation to beyond the roof, without openings, and designed to prevent the spread of fire to the adjoining risk. This is provided for by the Building Acts in force in Lond. and many large towns in the U.K. In the U.S. this wall, which is not yet so generally adopted, is designated a *Standard wall*. [FIRE FENCE.] [FIRE PROTECTION.]

FIRE WARDENS.—Persons appointed in those States of Germany and Switzerland in which the Gov. insures the buildings; and whose especial duty it is to make periodical visits of inspection, with a view to see that proper precautions against fire be preserved. We believe that many of the early towns in the U.S. appointed Fire Wardens.

FIRE WARNINGS.—See FIRE ALARMS; FIRE CALLS; FIRE TELEGRAPHS.

FIREWORKS.—These are believed to have been unknown to the ancient Greeks and Romans; although the Chinese are reputed to have manufactured them in very remote ages. They are stated to have been manufactured in Florence about 1360; and to have been employed as a spectacle in 1588. In more modern times they have contributed largely to the number of fires, and as such have been excluded from among the ordinary risks covered by pol. of fire ins.

1667.—The Fire Ordin. of Lond. passed this year contained the following:

XXVI. *Item*, That no person whatever be henceforth permitted at any time to make or cause to be made any sort of *Firework*; or to fire or cause to be fired any such fireworks within the City or Liberties thereof; except such persons only as shall be thereunto appointed by H.M. or any lawful authority under him.

Another Ordin. was issued on this subject in 1697. See FIRE PROTECTION.

1697.—The 9 & 10 Wm. III. c. 7.—*An Act to prevent the throwing or firing of Squibbs, Serpents, and other Fireworks*—recites: "Whereas much mischief hath lately happened by throwing, casting, and firing of squibbs, serpents, rockets, and other fireworks, some persons having thereby lost their lives, others their eyes, others have had their lives in great danger, and several other damages have been sustained by many persons, and much more may thereby happen, if not speedily prevented." For remedy whereof, persons were prohibited from making or selling such fireworks; and penalties imposed for throwing or firing the same. The provisions of this Act soon came to be disregarded, and practically remained so for nearly a century and a half.

1839.—By sec. 54 of the Metropolitan Police Act, 2 & 3 Vict. c. 47, passed this year (sub-sect. 15), every person who should throw or set fire to any firework in any thoroughfare or public place was to be liable to a penalty of 40s.

1846.—By the 9 & 10 Vict. c. 25.—*An Act for preventing malicious injuries to persons and properties by fire, or by explosive or destructive substances*—the improper use of fireworks can be made a punishable offence.

1858.—Explosion at Mr. Bennett's firework manufactory, Westminster Road, Lambeth, 5 persons killed, about 300 more or less seriously injured, and much property destroyed.

1860.—By the 23 & 24 Vict. c. 139.—*An Act to amend the Law concerning the making, keeping, and carriage of Gunpowder and compositions of an explosive nature, and concerning the manufacture, sale, and use of Fireworks*—the penalty for throwing fire-

works of any kind into any thoroughfare or public place was increased from 40s. to £5 (sec. 9). And no person may sell fireworks without a licence (sec. 8).

1872.—Mr. Griswold, in his *Fire Underwriter's Text-book*, lays it down, we presume upon the authority of some decided case, that, where the pol. provides that it "should be void if any articles subject to legal restrictions should be kept, unless specially consented to;" and a Municipal Ordin. forbids the keeping of certain kinds of fireworks; such pol. will not be held to cover such fireworks as may be forbidden by the Municipal Laws.

He also quotes another case (without date and reference), where the ins. was upon the plt.'s "stock of fancy goods and other articles in his bus. as a jobber and importer, with the privilege of keeping fire-crackers on sale." The pol. contained a clause providing that fireworks, among other things, should be specially written in the pol., otherwise they were not to be covered by the ins. The loss arose from a fire which originated in the fireworks for sale in the store. It was not pretended that fireworks were included under the name of "fire-crackers;" but the plt. contended they were included in the description "other articles in his line of bus." This evidence was rejected by the Court below, and judgment given for the deft. Upon appeal to the Circuit Court for Maryland, U.S., it was held by Chase, C.J.:

That the pol. itself requires that fireworks shall be specially written in it. They are among the goods described as specially hazardous, and add 50 cents. on the 100 dol. to the ordin. rate of ins. It is impossible to think they are described by the general terms used in the pol. The ins. was at the ordin. rate. There can be no doubt that the evidence was properly rejected; the judgment of the Circuit Court must therefore be affirmed.

1873.—In *Jones v. The Firemen's Fund Ins. Co.*, before the Commission of Appeals of N.Y., the facts were as follow: The pol. was issued upon a stock of fireworks, ordnance stores, and other merchandize, hazardous and extra-hazardous: provided that, if the premises should be used for the purposes of carrying on therein any trade or occupation, or for storing or keeping therein any article, goods, or merchandize, denominated hazardous, extra-hazardous, or specially hazardous, in the 2nd class of hazards annexed to the pol., the pol. should be void so long as the same should be so used. The pol. also provided that whenever gunpowder or any other art. subject to legal restrictions should be kept in quantities greater than allowed by law, or in a manner different from that prescribed by law, the pol. should be void.

In the 2nd class of hazards annexed to the pol., under the head of "hazardous" were "fire-crackers in packages;" and under the head of extra-hazardous, "matches—stocks of on sale." No art. denominated specially hazardous were mentioned in the 2nd class; but in the 3rd class of hazards annexed to the pol. were art. denominated "specially hazardous," amongst which were "fireworks."

An Ordin. of the Common Council of the City, in force at the time the pol. was issued, provided that no person should thereafter "store any fireworks of any kind or description, other than Chinese fire-crackers, within the limits of that City, except as in the Ordin. provided." The Ordin. further provided that "fireworks, excepting coloured pot and lance wheels, and other works of brilliant-coloured fires, not exceeding in value 1000 dol., might be kept for retailing within the fire limits, from the 10th day of June to the 10th day of July of each year, and no longer except by permission.

About a week before the fire occurred, the insured, in order to fill an order from a customer, purchased a quantity of signal lights, such as were in the Ordin. called "works of brilliant-coloured fires;" and a few remained on hand and were among the insured goods when the fire occurred. The evidence tended to prove that such goods were constantly kept in the store, and that the risk of fire was not only greatly increased thereby, but that it orig. in these signal lights.

The fire occurred on 26th Aug., and the property insured was totally destroyed.

On the trial in the Court below, the judge refused to dismiss the plt.'s complaint; and refused to submit to the jury the question whether or not by keeping those goods the risk was increased, and directed a verdict for the plt. It was now held—1. That it was not intended that the ins. should cover an article so especially hazardous that the insured had no right to store it. 2. Fireworks, in the sense in which the term was used, had reference to such fireworks as were in the prohibition excepted, or might by permission be kept for retailing. 3. If upon the whole case the defendant was not entitled to a nonsuit, he was entitled to have the question whether the risk was not increased by keeping the prohibited article submitted to the jury.—*Ins. Law Jour.*, ii. 186.

1875.—By sec. 48 of 38 & 39 Vict. c. 17—*An Act to amend the Law with respect to manufacturing, keeping, selling, carrying, and importing Gunpowder, Nitro-Glycerine, and other explosive substances*—regulations are contained in regard to firework manufactories; and under the powers of this Act the Sec. of State has issued a series of regulations as to small firework factories.

1876.—The National Board of Fire Underwriters in the U.S. have taken timely precautions to prevent the mischief which might arise from over-zeal in celebrating the Centennial of American Independence.

The manufacture of fireworks, by reason of explosions and from other casualties, leads to an ann. loss of life more or less considerable. These are included in the Reg.-Gen. returns, either under burns, or violent deaths. [FIRE PROTECTION.] [GUNPOWDER.]

AT SEA.—These terrible calamities appear to be largely on the increase. The loss of life too often, and the destruction of property always, renders such fires very important from an ins. point of view. [FIRES ON BOARD SHIP.] [MARITIME CASUALTIES.] [SHIPS, INS. OF.] [SHIPWRECKS.]

FIRES AT THEATRES.—See THEATRES.

FIRES CAUSED BY ACCIDENT.—Fires caused by Accident are here distinguished from those caused either by Negligence or Design, which are spoken of under separate heads. A certain per-centage of fires will always result from accident, as defined under ACCIDENT in this work; what that per-centage may be we shall have occasion to consider under FIRES AND FIRE INS., STATISTICS OF. It is certain that, after deducting the fires caused wilfully, by far the larger proportion remaining are the result of negligence in some of its multitudinous forms; but still accidents are inevitable: and it may be considered that no amount of care will render ins. altogether unnecessary.

1708.—By the 6 Anne, c. 58, it is provided that no action, suit, or process whatever should be had, maintained, or prosecuted against any person, in whose house or chamber any fire should, after 1st May, 1708, accidentally begin; nor any recompense be made by such person for any damage suffered or occasioned thereby, any law, usage, or custom to the contrary notwithstanding. This provision was to remain in force 3 years.

1711.—The preceding Act was made perpetual by 10 Anne, c. 24, s. 1.

1772.—By the 12 Geo. III. c. 73, sec. 37, a similar exemption from consequences was enacted.

1774.—By sec. 86 of the former Metropolitan Building Act—14 Geo. III. c. 78—the exemption of 1708 is again enacted, and the exemption extended to any “stable, barn, or other building, or on whose estate” any such accidental fire shall happen. This portion of the Act remains unrepealed, and has been held now to operate as a public Act, and not to be confined in its operations to the districts to which the Act orig. applied. The Act does not apply where the fire is lighted intentionally, and fire happens to result.—*Filliter v. Phippard*, 1847.

1804.—By the *Code Napoléon* (sec. 1733), tenants of houses are answerable in case of fire, unless they can prove that the fire happened by accident or superior force (*force majeure*), or by faulty construction, or that the fire was communicated from a neighbouring house.

1847.—The Towns Police Clauses Act of this year—10 & 11 Vict. c. 89—contains the following:

31. If any chimney accidentally catch or be on fire within the said limits, the person occupying or using the premises in which such chimney is situated shall be liable to a penalty not exceeding 10s. Provided always that such forfeiture shall not be incurred if such person prove to the satisfaction of the Justice before whom the case is heard that such fire was in no wise owing to omission, neglect, or carelessness of himself or servant.

1865.—The Metropolitan Fire Brigade Act of this year—28 & 29 Vict. c. 90—leaves the exemption of 1708, as amended in 1774, still in force.

FIRES CAUSED BY LIGHTNING.—These will be spoken of in detail under LIGHTNING. It is sufficient here to state that fire ins. pol. usually cover this risk. [EXPLOSIONS, sub-heading *Gunpowder*.]

FIRES CAUSED BY NEGLIGENCE.—So far as can be gathered from the traditions of early nations, a principle has prevailed that whoever caused damage to life or property by fire should be punished in proportion to the degree of negligence exhibited; and further that he should be compelled to repair the damage to the extent of his means. Moses estab. a law of this kind, which is believed to have been but the counterpart of that in force among the early Egyptians.

We propose to review the authorities upon the subject, as forming part of our hist. of FIRE PROTECTION.

By the Common Law of England, every master of a house or chamber was bound so to keep his fire as to prevent it from occasioning injury to his neighbours and others. If a fire broke out in a house and burnt the adjacent dwelling, or did other damage, the master of the house in which the fire began was liable to make compensation for the injury, and it was not necessary to prove negligence, which the law presumed. Thus, “If my fire by misfortune burns the goods of another man, he shall have his action on the case against me.” “If a fire breaks out suddenly in my house, I not knowing it, and it burns my goods, and also my neighbour’s house, he shall have his action on the case against me.” “So, if the fire is caused by a servant or guest, or any person who enters the house with the consent of the *paterfamilias*; but not when kindled by a stranger who enters his house against his will.” And the custom extended not only to fires commencing in dwelling-houses, but also to a fire lighted in an adjoining close.—*Comyn’s Digest*, quoted by Mr. Bunyon in *Assu. Mag.* (See 1851.) How far Common Law has been modified by the Statute and Case Law we have next to examine.

1707.—By the 6 Anne, c. 58, it was recited—“And whereas fires often happen by the negligence and carelessness of servants,” and further, that if any menial or other servant through negligence or carelessness should fire or cause to be fired any dwelling-house or out-house, such servant being thereof lawfully convicted by the oath of one or more credible witness, he should forfeit the sum of £100, to be paid to the churchwardens of the parish. In default, 18 months in the workhouse.

1708.—The Common Council of Lond. caused to be reprinted the clause of the preceding Act *in extenso*, and circulated in the City. Stow says, "These sad accidents in the City by fire, occasioned oftentimes by the negligence of servants taking tobacco, or not putting out their candles, or leaving live embers in dangerous places, or otherwise," moved the Parl. to the passing the said Act.

1754.—A case, apparently not hypothetical, is given by Sir James Balfour in his *Practicks of the Law of Scotland*, designated "*A Merrie Question anent the Burning of a Miln*"—which affords an excellent specimen of the old Lowland Scotch language, in add. to illustrating the law in regard to fires caused by negligence :

Gif it happin that ony man be passand in the King's gait or passage, drivand befor him twa sheip festnit and knit togidder, be chance ane horse, havand ane sair bak, is lying in the said gait, and ane of the sheip passis be the ane side of the horse, and the uther sheip be the uther side, swa that the band quhairwith they are bund tuich or kittle his sair bak, and he thairby movit dois arise, and caryis the said sheip with him heir and thair, until at last he cumis and enteris in ane miln havand ane fire, without ane keipar, and skatteris the fire, quhairby the miln, horse, sheip, and all is brunt; *Quaritur*, Quha sall pay the skaith? *Respondetur*, The awner of the horse sall pay the sheip, because his horse could not have been lying in the King's hie streit, or commoun passage; and the millar sall pay for the miln and the horse, and for all uther damage and skaith, because he left ane fire in the miln without ony keipar."

1772.—By 12 Geo. III. c. 73, a fine of £100, or in default imprisonment with hard labour for 18 months, is imposed upon servants causing fires by negligence.

1774.—By the Metropolitan Building Act—14 Geo. III. c. 78—the penalty last named was re-enacted in the following form :

And whereas fires often happen by the negligence and carelessness of servants, be it therefore enacted, by the authority aforesaid, that if any menial or other servant or servants, through negligence or carelessness, shall fire or cause to be fired any dwelling-house, or out-house, or houses, or other buildings, within the limits aforesaid or elsewhere in the Kingdom of Gt. Brit., such servant or servants being thereof lawfully convicted, by the oath of one or more creditable witness or witnesses, made before two or more of H. M. Justices of the Peace, shall forfeit and pay the sum of £100 unto the churchwardens or overseers of such parish where such fire shall happen; to be distributed amongst the sufferers by such fire in such proportions as to the said churchwardens shall seem just; and in case of default, or refusal to pay the same, immediately after such conviction, the same being lawfully demanded, that then, and in such case, such servant or servants shall, by warrant under the hands and seals of two or more of H. M.'s Justices of the Peace, be committed to the common gaol or house of correction, as the said Justices think fit, for the space of 18 months, there to be kept to hard labour.

1789.—In the Reformed Criminal Code of Tuscany, promulgated this year, there is the following :

But when the fire shall be the consequence, not of fraud, but of negligence, the punishment shall not exceed that of banishment or confinement; and when the fault shall be found to be but trifling, or very trifling indeed, it shall no longer be treated as a criminal, but a civil matter.

1804.—By the *Code Napoléon* (art. 1383) it is declared: "Every one is responsible for the damage of which he is the cause, not only by his own act, but also by his negligence or by his imprudence." While further (art. 1284): "A person is responsible, not only for the injury which is caused by his own act, but also for that which is caused by the act of persons for whom he is bound to answer, or by things which he has under his care." As a result of this law, nearly everybody insures the property of his surrounding neighbours, as well as his own; hence some properties become insured many times over, to the advantage, in this case, of the ins. offices.

1837.—In *Vaughan v. Manlove*, before the English Courts this year, it was held, that an action for damages lies against a person for so negligently constructing and keeping a hayrick on the extremity of his land, that, in consequence of its spontaneous ignition, his neighbour's house is burnt down. (3 Bing. N.C. 478.)

1847.—Under the Towns Police Clauses Act—10 & 11 Vict. c. 89, sec. 31—a penalty of 10s. is imposed for carelessness, whereby any chimney shall accidentally catch [CHIMNEYS.]

This year there arose the case of *Filliter v. Phippard*, wherein the facts were as fol. The plaintiff and defendant were owners of adjoining lands. The defendant lighted a fire in one of his closes at a time when, by reason of the state of the wind and weath, the fire was dangerous to do so. The fire extended to the plaintiff's close, and destroyed hedges, gates, etc.:—Held, that the defendant was not relieved from liability by the 6 Anne, c. 13, and 14 Geo. III. c. 78, which must be taken to apply to fires which are the result of chance, or are incapable of being traced to any cause; but not to those which, although they may be accidental as contradistinguished from wilful, are occasioned by negligence or want of reasonable care. (17 L.J. Q.B. 89.)

1851.—In vol. i. of *Assu. Mag.* is a paper contributed by Mr. C. J. Buny, *On the Liability of the Occupier of a Tenement for Damage done to that of a Neighbour by Fire kindled through his own or his servant's negligence*, wherein the legal at issue is critically examined, and the law upon the subject stated. This learned writer concludes his paper, says: "Hence it appears that although a man may insure his own property to its full value, he may yet become a loser to a certain extent, in the event of a fire occurring, by being compelled to indemnify his neighbour. Whether the ins. offices may ever choose to enforce this equity in their own favour, or whether it will be a question for their own decision, and one which will probably be decided in favour of the cantile rather than a legal right; but as there is nothing to prevent a pri-

from exercising this right, it may become a question whether the liability is not one which may itself be guarded against by ins." We have seen that in France it is so guarded against.

1852.—The "Instructions" to the agents of the *Protection Fire*, of Hartford, U.S., promulgated by the Actuary of the Co., Mr. Mark Howard, this year, offer the following practical obs. regarding negligence:

The office justly relies upon a prudent and careful oversight of the insured premises in all cases, and the rates of prem. are graduated, accordingly, in view of the ordinary hazards; but no rate of prem. is adequate to the extraordinary hazard of habitual gross negligence. It may, however, be doubted whether any degree of mere carelessness will bar a claim under a pol. of ins., according to several recent decisions in the Courts. Such decisions can only proceed upon the supposition that the character of the applicant for prudence and care has been duly weighed when the risk was offered; and that the insurer is thereby debarred from any such after-plea as fully as he would be from objecting to the extra-hazardous occupation, or unsafe construction of a building, which had been regularly surveyed by his own agent. You will perceive at once the important bearing which this construction of the contract of ins. has upon the duty of the agent. An accurate and ready judgment as to the character of the applicant for sobriety and prudence becomes indispensable.

1856.—Mr. James Braidwood, then Supt. of the London Fire Brigade, read before the So. of Arts a paper: *Fires: the Best Means of Preventing and Arresting Them, with a Few Words on Fireproof Structures*. In dealing with the causes of fires, he placed first and foremost: "Inattention to the use of Fire and Lights," on which he said:

The opportunities for inattention to fires and lights are so various that it is impossible to notice the whole. Incautiously approaching window and bed curtains with a light and airing linen before the fire are almost daily causes of fire in Lond.; and some of the most distressing cases of loss of life have originated from these and similar causes. Children playing with fire is also another constant cause of fires and loss of life. The dresses of females taking fire adds very much to the list of lives lost by fire, if it does not exceed all the other causes put together. Taking off the burning coals from a fire and laying them on the hearth also causes fires occasionally. Reading in bed by candle light is another source of the same evil. A very serious ann. loss is also caused by a want of due care in hanging up and removing goods in linen-drapers' shop-windows when the gas is burning. Flues taking fire often result in mischief, and it is believed that many serious fires have arisen from this cause, which can hardly be called accidental: as, if flues are properly constructed, kept moderately clean and fairly used, they cannot take fire.

It is seen by the foregoing that simple and ordinary causes, such as with reasonable care might be easily averted, are really those which produce the greater mischief.

1858.—In *Syred v. Carruthers* injury done to goods pawned, by a fire upon the premises of a pawnbroker not affirmatively shown to have occurred through the default, neglect, or wilful misbehaviour of the pawnbroker, does not authorize a Justice of the Peace to give satisfaction to the pawner (under 39 & 40 Geo. III. c. 99, s. 24): there being no *prima facie* presumption that such fire is owing to the default, neglect, or misbehaviour of the owner of the premises. (27 L.J. M.C., 273.)

1860.—In the case of *Hynes v. MacFarlan*, before the Canadian Courts this year, it was held, that a person setting fire to grass upon his land at an improper and unfitting time, was by that mere fact, which is construed into negligence, responsible for the loss thereby of a threshing machine, which had been brought on his land to thresh his grain. [9 Lower Canada, Q.B. Appeal Side, 502.]

1874.—Prof. A. P. Peabody, D.D., contributed to the *International Review*, January this year, an interesting art.: "Fires in American Cities," wherein occurs the following passage:

There should be in the next place, in the legal provisions connected with ins., an inevitable penalty on carelessness: which, however free from bad intent, is always blameworthy, and merits at least a pecuniary mulct. We doubt whether it would be well to go to the extreme length of the French law, which deprives of indemnity the person on whose premises a fire originates. Such a provision would undoubtedly prevent half of our fires; but with us it would leave some very hard cases, while in France fires are of infrequent occurrence, and are commonly extinguished with slight damage, so that ins. is sought mainly with reference to the rare contingency of an extensive conflagration. But would any essential wrong be done, were the person on whose premises a fire commenced permitted to recover not more than two-thirds of the value of the property consumed? An exception might be made in cases in which it could be clearly proved that the fire originated from a cause that could not have been foreseen and prevented; but the presumption should be of carelessness in the absence of express evidence to the contrary. The negligence or folly of employés or servants should not be accepted as a plea in abatement of the penalty. In all other matters a man is responsible for the mistakes and failures of those in his service, and this rule is founded in equity; for in whatever may compromise the well-being of those around him, a man is bound to exercise personal circumspection and vigilance, unless he can delegate his charge to safe agents. When a servant of well-known stupidity and shiftlessness, who would not be trusted with the delivery of a message or the removal of a porcelain vase, crams a stove or furnace with fuel, and so opens or closes drafts or registers as to make the combustion of the nearest woodwork inevitable, the blame belongs wholly to the master or mistress, who is no more justified in committing heating apparatus to the charge of a dolt or a fool than in giving loaded firearms to the keeping of an infant or an idiot.

The argument here is sound. We think the rendering of the French law hardly admits of the construction put upon it. A man there is legally liable for all damage done to a neighbour's premises by a fire originating on his own; but this risk he may cover by ins.

This subject will be further discussed in some of its aspects under FIRES, CAUSES OF (GENERAL); FRANCE, sub-heading *Fire*; LOCOMOTIVE ENGINES, FIRES FROM; and NEGLIGENCE.

FIRES CAUSED WILFULLY.—Under the Romans wilful fire-raising was punishable with death. It had been so under the law of Moses; and appears to have been so under the

still earlier law of the Egyptians. The practice of wilfully firing buildings appears to have been very common with the ancient Romans; and those found guilty of it were burned to death, enveloped in the *Tunica molesta*: a garment made of paper, flax, or tow, and smeared over with pitch, bitumen or wax; so that when brought to the place of execution, and the fire lighted, there was no chance of their escaping! [ARSON.]

1240.—In our art. FIRE INS., HIST. OF, under this date, we have shown the operation of the Custom of *Furnes*, as it was designated, as rendered by the law promulgated by Thomas Count of Flanders and Johanna his Countess. The whole of the property of the culprit appears to have been forfeited on discovery, and he banished. His property was first applied in restitution to sufferers.

1429.—An Act of Henry VI. declared that "If any threaten, by casting bills, to burn a house, *if money be not laid in a certain place*, and do after burn the house, such burning shall be adjudged high treason."

1545.—By the 37th of Henry VIII. c. 6, was inflicted the "pains of death" on all found guilty of certain crimes, amongst which were the secret burning of frames of timber prepared and made by the owners thereof ready to be set up and edified for houses; burning of wains and carts laden with coals or other goods; burning of heaps of wood, cut, felled, and prepared for making coals; cutting off the ears of the king's subjects, and divers other kinds of offences against property or the person.

1722.—The 9 Geo. I. c. 22, threw the damages sustained by owners from (*inter alia*) the "setting fire to any house, barn, or out-house, hovel, cock, mow, or stack of corn, hay, or wood, which shall be committed or done by any offender or offenders against the Act," upon the Hundred wherein such offence was committed, upon notice being given within 2 days after the occurrence of the offence.

1763.—By 4 Geo. III. c. 14, it is enacted (sec. 10): "And, for the better preventing mischiefs that may happen by fire, and to deter and hinder ill-minded persons from wilfully setting their house or houses, or other buildings, on fire, with a view to gaining themselves the ins. money, whereby the lives and fortunes of many families are lost, that the offices might expend the money insured in rebuilding or reinstating the premises "as far as the same will go." This could be done on request of persons interested; or on suspicion of fraud. This power has since been incorp. into the conditions of fire ins. pol., and has frequently been of value to cos. in dealing with suspicious claims. For the full clause see FIRE INS., HIST. OF, under this date.

1789.—In the Reformed Criminal Code of Tuscany, promulgated this year, there is the following:

45. Incendiaries, that is to say, those through whose fraud or malice a fire shall happen, shall be condemned to public labour for a time, and even for life: in proportion not only to the loss they shall occasion, but likewise to the risk of having occasioned a greater one than was intended in the execution of their very atrocious design.

1803.—The stat. 43 Geo. III. c. 58, after reciting that certain heinous offences, committed "with intent, by burning, to destroy or injure the buildings and other property of H.M.'s subjects, or to prejudice persons who had become insurers of or upon the same," had been of late frequently committed, and that no adequate means had been hitherto provided for the prevention and punishment of such offences, enacts, that, if any person or persons shall wilfully, maliciously, and unlawfully, set fire to any house, barn, granary, hop-oast, malt-house, stable, coach-house, out-house, mill, warehouse, or shop, whether such house, etc., shall then be in the possession of the person or persons so setting fire to the same, or in the possession of any other person or persons, or of any body corporate, with intent thereby to injure or defraud H.M., or any of H.M.'s subjects, or any body corp.,—the person or persons so offending, their counsellors, aiders, and abettors, knowing of and privy to such offence, should be, and were thereby declared to be, felons, and should suffer death, as in cases of felony, without benefit of clergy.

1810.—Under the Penal Code of *China* at this date, according to the authority of Sir Geo. Thos. Staunton, Bart., F.R.S., the punishment of a person who accidentally set fire to his house was 40 blows; but if the fire spread to the gate of an Imperial Palace, then death. Wilfully setting fire to one's own house 100 blows; to any other house, private or public, death.

1812.—By the 52 Geo. III. c. 130—*An Act for the more effectual punishment of persons destroying the properties of H.M.'s subjects, and enabling owners of such properties to recover damages for injury sustained*—it was enacted that every person who should wilfully and maliciously burn any buildings, erections, or engines, used in the way of trade or for storing merchandize and other effects, should upon conviction be punished with death "without benefit of clergy."

1827.—By the 7 & 8 Geo. IV. c. 30—*An Act for consolidating and amending the Laws in England relative to malicious injuries to property*—the maliciously setting fire to any church, chapel, house, or certain specified buildings, also to coal-mines, and ships, was still punishable by death.

1837.—By 7 Wm. IV. & 1 Vict. c. 89—*An Act to amend the Laws relating to burning or destroying buildings and ships*—it was again enacted that the unlawfully and maliciously setting fire to inhabited dwelling-houses should be punished with death;

while the wilfully setting fire to churches, chapels, warehouses and manufacturing and trade buildings, as also to ships, was punishable with transportation, or imprisonment.

1846.—There was enacted 9 & 10 Vict. c. 25—*An Act for preventing malicious injuries to persons and property by fire, or by explosive or destructive substances*. It deals first with blowing down buildings by explosive substances maliciously, which it makes a felony [FIRE PROTECTION], and then proceeds:

VII. And be it enacted, That whoever shall unlawfully and maliciously by any overt act attempt to set fire to any building, vessel, or mine, or to any stack or steer, or to any vegetable produce of such kind, and with such intent that if the offence were complete the offender would be guilty of felony and liable to be transported beyond the seas for his natural life, shall, although such building, vessel, mine, stack, steer, or vegetable produce be not actually set on fire, be guilty of felony, etc. (See 1861.)

1847.—Under the Towns Police Clauses Act of this year—10 & 11 Vict. c. 89, sec. 30—where that Act may apply, any person wilfully setting fire to a chimney is liable to a penalty not exceeding £5; and this does not exempt him from indictment for felony. [FIRE PROTECTION, 1847.]

1861.—By the Consolidating Act—24 & 25 Vict. c. 97—for amending the Statute Law of England and Ireland relating to malicious injuries to property, a graduated scale of punishment is enacted for persons wilfully and maliciously setting fire to churches, dwelling-houses occupied and unoccupied, buildings, manufactories, farmhouses, railway stations, public buildings, goods in buildings; or for attempting to set fire to the same. As also for injuries by explosive substances. The punishment of death was no longer extended to these crimes. Transportation, imprisonment, and whipping being substituted. This repealed the Act of 1846.

1865.—Mr. Edwin Chadwick, C.B., in his Address on "Economy and Trade" before the Social Science Congress held in Sheffield this year, spoke of the "unguarded practice of ins.," and said that in the course of the inquiries he had conducted from time to time regarding water supply, loss of life in towns, etc., he "found that wilful fires, for the sake of ins. money, are far more frequent, especially in the metropolis, than is commonly supposed," adding:

In answer to my inquiries of Mr. Braidwood, the late Superintendent of the Fire Brigade in the metropolis, and from the best means of information possessed on the subject of the property insured there, I found that about *one-half in value* is insured. As, however, the larger masses of property in goods or warehouses are insured, it would follow that less than half the *numbers of property* are ins. But on looking over the fire returns I was struck with the fact, that two-thirds or 71 p.c. of the warehouses and contents were insured. How was this! that apparently most properties were lost, on which, according to the common theory, most prudence and care had been exercised by ins.? I never, if I can help it, adopt any important conclusions from statistics, without inquiring into the particulars which those statistics represent. I therefore interrogated Mr. Braidwood as to how, on any doctrine of chances, there could be more burnt of insured than of uninsured properties? He was extremely reluctant to give any public answers, and he spoke to me privately upon them; and what he said will now no longer compromise him. His restraint was fair, because officers conversant with classes of cases see more, and can judge of evidence in respect to them better than others, and arrive at sure conclusions themselves, which they may not be prepared to establish by full technical evidence. His admission or declaration was that the difference was *not accidental*; that the brigade were regularly occupied in preventing the spread of fires, a large proportion of which they knew were wilful. They came to their conclusions from *prima facie* circumstantial evidence, as to the times and the modes of fires, the recency of ins.—the parties named being in debt or straightened circumstances—suspicions as to the quantities of the stock and furniture consumed—full and high ins. of old, tumbledown, or inconvenient premises—the immediate production of well-matured and complete plans for the rebuilding of the premises, *which must have been prepared before the fire*. He told me that, from the worthless state of some premises, and from the sorts of ins. effected upon them, he regularly expected to be called upon to prevent the spread of fires from them.

The preventive measures which Mr. Chadwick proposed have been spoken of under FIRE INQUESTS.

1867.—Before the Parl. Committee which sat this year on the Protection of Life and Property against Fire, and the "best means to be adopted for ascertaining the causes and preventing the frequency of fires," evidence was given of a very startling character. Thus Mr. S. J. Fletcher, Sec. of *Sun*, after 52 years' experience in fire ins. bus., said that his impression, "after giving a great deal of attention to the subject, is that nearly *one-third of the fires which occur are intentional, or the result of culpable carelessness*" (1326); he afterwards said (1558):

I have endeavoured to get some further statistics together, and I have done everything which I possibly could to refresh my memory, and the conclusion at which I have arrived is, that the number of fires which are now actually pending, the origins of which I am perfectly satisfied were intentional, is far greater than ever occurred before in my experience. I cannot recollect any period of my long experience in which we have had so many intentional fires under investigation as there are at the present moment; in fact, that subject now occupies a very large portion of my time; and the onerous character of these inquiries is a sad drawback to the performance of my other duties. . . . (1559.) We have very few statistics as to the origin of fires. As to the number of fires, they have increased very considerably.

Mr. Swanton, Supt. of the Lond. Salvage Corps, gave evidence before the same Committee, stating it to be his impression that there had been of late a large increase of incendiary fires. "There is no doubt of it" (1770). FIRES AND FIRE INS., STATISTICS OF. Other witnesses testified to the same effect.

1872.—The Rep. of the Fire Asso. of Posen, an Eastern Province of Germany, where the bus. is under the control of Gov. officials, gives the following facts for this year. Its fires during the year were 764, of which 12 were known to have been caused

by arson, while no less than 445 were believed to have been incendiary. This is just under 60 p.c. (59·8) of the whole; while there were still further 81 from causes unknown and undiscoverable.

The Rhenish Fire Asso., Western Germany, where the bus. is also under the control of Gov. officials—had closely corresponding experience, the ratio of fires from arson and incendiarism being estimated at 59 p.c.

1873.—The total number of fires in the Fire Asso. of Posen this year was 774, of which 24 were known to have resulted from arson, and 427 others were believed to have been either from arson or incendiarism; making a per-centage of 59·5; while there were in addition 103 from causes unknown.

In the Rhenish Fire Asso. this year the fires attributed to arson and incendiarism were 58 p.c. of the whole.

1874.—In a letter from Mr. Medill, Mayor of Chicago, to the *Tribune* of that City, there occurs the following passage:

Such a thing as a man setting his own premises on fire, or a tenant firing his stock of goods, for the sake of obtaining the ins., is unknown in Berlin or Germany, and is seldom ever heard of in Europe, except in Great Britain—where the American reckless system of ins. and temptation prevails to a small extent. But *America* is the country of incendiary fires—of “selling out to the ins. cos.”—above all others put together.

The statement here made hardly coincides with the facts already given regarding at least two prominent German cos. In Berlin, where there is a most efficient fire brigade, and, what is even of more importance, a searching inquiry into the cause of every fire, it is prob. the proportion of incendiary fires is usually small.

Mr. John B. Livingston, Fire Marshal of Alleghany County, Pennsylvania, in his Rep. for 1874, makes the following remarks upon incendiarism:

It is with regret that I am obliged to call your Honours' special attention to the greatly increased number of incendiary and suspicious fires the past year; which, I think, can mainly be accounted for by the great pecuniary embarrassment of the times, the distress among the labouring classes occasioned by the stoppage of our mills and workshops, and the shrinkage of values in real estate and merchandize generally. These causes, I think, often suggested and induced those who were over or fully insured to conclude that it was a good time to sell out to the ins. cos. I am reluctant to attribute so many fires to these causes, in number, perhaps, exceeding all the incendiary and suspicious fires that have taken place in the county for 5 years, and greatly in excess of the city of Philadelphia; the fire marshal of that city only reported 45 “incendiary and suspicious,” and 15 “unknown,” out of the 626 fires occurring in 1874. Your attention is directed to the large number of fires orig. in unoccupied buildings, generally dwellings in the outer wards, and to the still greater number of buildings burned, in whole or in part, that were over insured and fully insured. The over ins. often arising from the depreciation of values since the ins. was taken, and sometimes by the neglect of the underwriter or his sub-agent. The underwriter should never forget “that to the dishonest man ins. is but another name for the privilege of converting his house or goods into current funds at will.” “It often means escape from bankruptcy, or the successful concealment of fraud, which, if detected, would result in certain ruin.” “Over ins. is the key-note to eight out of ten incendiary and suspicious fires; it is merely a notice to the insured, that if his property is consumed, he alone, of all others that his negligence or crime afflicts, shall go unscathed; it is a premium for recklessness and dishonesty, for every pol. of ins. issued is a contingent agreement to buy the property insured.” “Over ins., in many cases, would be done away with, if each co. would make it an inviolable rule not to accept a risk from any person, without having the same examined personally by a competent surveyor, the said surveyor, from time to time, to make a personal inspection of the property insured, while the pol. is in effect.” Payment of losses, in all cases of suspicious fires, should be delayed until an opportunity is afforded to investigate their origin. “There is no question that, in the event of an incendiary or very suspicious fire, that class of persons who contemplate such things watch each case with anxious care, and when they see a resistance to their claims, and a deferred payment and the prospect of a suit at law, argue to themselves that things are not quite so pleasant and smooth as in the halcyon days of the Old Builders.” But three incendiary fires took place in buildings not insured. The average loss on each fire was nearly 1500 dols.

1875.—The National Board Committee on Incendiarism and Arson, in its Rep. for this year, stated that 184 reports had been received from stock and mutual cos. in almost every State, and the provinces of Canada; and while the entire reports were not as definite as could be wished, there was sufficient information to conclude that at least 35 p.c. of the number of fires for the year 1875 originated from incendiarism, and 55 p.c. of the whole amount of property destroyed was the result of that cause. The sum total of destruction during the year in the U.S. and Canada was £17,200,000 stg., of which nearly £10,000,000 stg. was the work of incendiaries.

There can be no doubt that a considerable proportion of the wilful fires are occasioned in view of preventing the discovery of theft or other wrong doing. The increasing frequency of destructive fires at Liverpool some years since led to a close inquiry into their causes, by Mr. Rushton, the stipendiary magistrate, when he was led to the conclusion that a considerable proportion of them were wilful: the offences he found were often committed to conceal extensive depredations, by servants or persons in charge of warehouse property.

Again, it has to be borne in mind that a certain proportion of these fires originate from the acts of persons not entirely responsible for their doings. Thus, Dr. W. A. Guy, a great authority upon the subject, asserted [in his Address to the Statistical So. 1874], that out of every 1000 healthy convicts 20 will be found to have been convicted of arson; while out of the imbecile class of convicts no less than 70 p. 1000 is the proportion convicted of wilful fire-raising. Hence it is seen that fire ins. offices have a strong interest in the proper surveillance of the imbecile and criminal classes.

The German fire pol. do not cover damage by fire resulting from “gross neglect on the part of the person or persons insured.” [FIRE INS. POL., German, Art. I. sec. 2.]

The subject in its varying aspects is further considered under ARSON; CORONERS; FIRE INQUESTS; FIRES, CAUSES OF (GENERAL); FIRES AND FIRE INS., STATISTICS OF; FRAUDS ON INS. ASSO.; INCENDIARISM.

FIRES, CAUSES OF (GENERAL).—A correct knowledge of the causes of fires is a very necessary preliminary to the taking effective measures for their cessation or removal. These causes, at first few and simple, have grown into complex phase, arising from the multiplication of processes of manufacture, or from the continued introduction of new products into commerce. We propose briefly to review certain of these progressive causes, under an alphabetical arrangement. The relative proportions of fires resulting from these and other causes will be shown under FIRES AND FIRE INS., STATISTICS OF.

Ashes and Cinders.—These are old offenders. In *Seasonable Advice*, etc., pub. by order of the Lord Mayor, 1643, the inhabitants of Lond. are cautioned to be careful regarding ashes, cinders, and "warm sea-coal." And the Fire Ordin. of the City of London passed 1667 (the year following the Great Fire) contained the following: "XI. Item, That every inhabitant prepare some secure place in their dwellings (not under or near any staircase) to lay in their seacoal-ashes, embers, or any other sort of fire-ashes; and that the said ashes be quenched with water every night before they go to bed."

Numerous fires still continue to be traced to these causes; especially in cases where rags, shavings, and other substances more or less saturated with mineral oils or other inflammable compounds are also consigned to the dust box.

Atmospheric Influences.—The question why fires at certain times spread so much more rapidly, and are so much more difficult to check than at others, possesses a very high degree of importance and interest. . . . Every one who regularly attends to an ordinary grate or stove has frequent occasion to observe that a fire, which burns brightly at certain times with a certain draught, will often require, at other times, a much greater draught to keep it from going out. In some cases . . . this is readily understood; but in many instances it is in a very great degree owing to causes which neither science nor practical observation knows anything about. The simple fact in regard to the whole matter is that the different states of the earth's atmosphere are a subject concerning which, like a great many other things, science is able to tell much less than scientific men are always willing to acknowledge. There are certain philosophic truths, indeed, in regard to the atmosphere, which are well ascertained, and respecting which no one capable of understanding them can have any doubt. But there are others in reference to which we are as ignorant as the ancient Romans. There are very many phenomena connected with the subject of the air we breathe, for which science utterly fails to account, and among these the numerous phenomena produced by the action of fire occupy no unimportant position.—*N. Y. Times*, 1872.

This is a subject worthy of further consideration. [FIRES, GREAT, London, 1666.]

Benzine.—When the great house of Harper Brothers burned for the second time, it was discovered that the fire originated in the use of benzine to clean rollers. The use of benzine was forbidden in the pol. of ins.; but the Harpers proved the custom of using it, as they had used it, to be so universal that the Courts decided it to be an integral part of the hazard—a fact of which the underwriters had been until that time in profound ignorance.—*E. A. Hewitt*, 1876.

See a remarkable case of fire resulting from electricity developed by benzine in a dye-house—sub-heading *Electricity*, 1875.

Benzole.—In the making of aniline dyes, benzole—a substance even more dangerous than benzine, differing from it in composition, in origin, chemical reaction, specific gravity and inflammability, flashing into flame at a temperature of only 80 degrees—plays a prominent part. It is used also as a mordant in calico printing, and as a solvent in the manufacture of rubber goods, combs, brushes, buttons, and even India rubber hose. How vitally this affects the fire underwriter is shown by the fact that there is now in this country [U.S.], invested in the manufacture of such goods, 8,000,000 dols. of cap., and the value of the ann. production is 15,000,000 dols.—*E. A. Hewitt*, 1876.

Birds.—Birds coming down chimneys, and becoming partially ignited, and then flying to the drapery or curtains, have caused serious fires. Birds' nests under the eaves and wooden crevices of houses have been frequently set on fire through sparks from a neighbouring chimney, and have contained sufficient inflammable matter to set fire to the buildings.

Fires have occurred through the spontaneous ignition of pigeons' dung under the slates and tiles of houses. Professor Buckland traced two fires to this cause. See *Builder*, 28th September, 1844.

Some years ago a fire occurred in Lond. through a jackdaw getting a box of lucifers, and pecking them until he set them on fire.—*Tozer*, 1874.

Bisulphate of Carbon.—The manufacture of this is more dangerous than the refining of petroleum. It enters into a great variety of manufacturing processes—the vulcanizing of rubber; the extraction of oil from cotton and flax seeds; the making of spices and perfumes; into silver-plating, and the manufacture of paper and lampblack. See *Lampblack*.

Cats and Dogs.—Cats and dogs have caused fires in various ways ; such as upsetting explosive and inflammable things into fires and lights, also through lying inside fenders and under fireplaces. Hot coals have fallen and adhered to their backs, which caused them to beat a hasty retreat, no doubt being anxious to get rid of the annoyance as soon as possible. They have sometimes succeeded by rolling or rubbing on carpets, curtains, beds, straw, shavings, and other inflammable things. The last instance I recollect occurred at a baker's shop in Albion Street, Gaythorn. A dog was lying under an oven fire, a piece of chip fell from the fire on to his back ; he immediately ran to some shavings, rolled upon them, at the same time setting them on fire before the eyes of his master. In 1863 three distinct fires were caused in one room of a gentleman's house in Canonbury, Islington, through a cat lying inside the fender, when some hot ashes fell out of the fire on to its back, which caused it to rush about the room, when the cinders were deposited in different places, which set fire to the carpet. . . . Although I have given the dogs the credit of producing work for the firemen, still it would not be fair if I were to omit to mention that they have frequently discovered and given timely notice of fires ; and many an anecdote can be told of the very great interest dogs take in and at fires.—Mr. Alfred Tozer, Chief of Manchester Fire Department, in *Hardwicke's Science Gossip*, 1874.

Celluloid.—This is a comparatively new material, in substance resembling ivory. It is used for knife handles, combs, rings, etc. It is to all appearance as hard as iron, and, when cold, possesses great strength and tenacity ; but it is as inflammable as tinder, and it burns more readily than pitch. A flash of a match will set off a box of this material, made up in any form, and produce a conflagration so utterly at variance with the apparent solidity of the article that it seems like magic. A new class of "extra-hazardous" must be made by all of our fire ins. cos. if this is to pass into common use. It is not known how many fires may already be traceable to this preparation, which evidently vaporizes at a comparatively low temperature.—N.Y. *Journal of Commerce*, 1874.

Coals, Spontaneous Combustion of.—An Address delivered to the Newcastle-on-Tyne Chemical So. by its President, Mr. Pattinson, early in 1876, contained the following :—

There has lately been a considerable increase in the number of cases of fire arising from this cause. From statistics collected by Mr. R. Cooper Rundell, and given by him in a report to the Underwriters' Asso. of Liverpool, it appears that, taking the number of vessels carrying upwards of 500 tons of coal which have sailed from the U.K. for ports south of the Equator during the first nine months of the years 1873 and 1874, the number of casualties from spontaneous combustion was 23, or about 2 p.c. of the total number of vessels, in 1873, and 50, or about 4 p.c. in 1874. The statistics further show that the fires are not confined to one kind of coal, but have occurred in most, if not all, kinds exported from all parts of the U.K. The theory which attributes spontaneous combustion to the presence of pyrites in the coal is consistent with the recently increased number of cases, if we consider that, owing to the extraordinary demand for coals and the high price of labour, the coals were more likely to be shipped without being so carefully freed from brassy or iron pyrites in later years than they were formerly. On the other hand, Richters has pointed out that, in the kinds of coal he experimented with, the coal which contains most pyrites is not that which is most liable to spontaneous combustion ; and his researches have shown that atmospheric air is rapidly absorbed by coal, and that the oxygen thus absorbed probably afterward combines with the organic constituents forming carbonic acid and developing heat. In all probability the heat which gives rise to spontaneous combustion is developed both by the oxidation of iron pyrites as well as by the oxidation of the carbonaceous constituents of the coal ; and that in the holds of vessels, where large cargoes of coal lie unventilated, or but imperfectly ventilated, this heat accumulates, and may ultimately be high enough to set fire to the cargo. The whole subject requires further investigation, and the Royal Commission now formed will, no doubt, not only elicit valuable information as to the causes of these sad disasters, but also suggest means of preventing them.

Some other facts on this subject are given under title COALS.

Dust.—Some facts regarding the origin of fires from DUST are given under that title in this work. Others are given under EXPLOSIONS, sub-heading *Flour Mills*.

Electricity.—The *Bulletin* of the National Board of Underwriters, U.S., for 1874, contained a paper by Mr. W. S. Newell, of N.Y., wherein is collected an array of instances of electrical phenomena produced by friction, compression, and other causes in buildings devoted to the manufacture of cotton, woollen, and silk goods. The following is a condensed summary of the same :

On dry frosty days, or dry cutting days, the electric spark is liable to be produced, and, if the conditions are favourable to ignition with neighbouring inflammable material, a conflagration is the result. In the machinery of woollen mills, wherever there is much friction electricity is generated, sometimes accompanied by sparks and shocks. In the shearing machines of woollen mills so much electricity may be developed, that sparks will appear on presenting the fingers, and if the uncovered head is presented, the hairs will stand out towards the cloth in a brush. Leather belts in factories being subjected to continual friction, pressure and "separation," are the source of some of the most vivid electrical phenomena. A main 18-inch belt in a cotton mill at Newburgh, N.Y., was so strongly electrified that it would send sparks to the ear of a passer-by who incautiously approached it, and a Leyden jar was readily charged with it. In the Buffalo car works, from the main belt a constant flow of electricity has, at times, been observed. An individual placing his knuckles within 18 or 20 inches of it, a steady stream of sparks nearly an inch long, visible in the light, passed to them. In the night the sparks fill the air near the belt with light. Similar phenomena may be observed in the basement of one of the public buildings in Washington, where a large belt is used. Many other instances of a like character can be cited.

Besides friction, compression, particularly when accompanied by heat, develops the phenomena. Scoured wool left over night in the drying-room, becomes capable, under certain atmospheric conditions, of giving shocks to the fingers in the morning. When woollen cloth is taken out of the presses, the electricity shows itself upon opening the folds. Sparks have also been observed upon stripping the rubber from the rolls of the grinding-mills in rubber works. Electricity is developed by heat and pressure in passing printing paper through printing presses. The phenomena of animal electricity is well defined. Atmospheric electricity sometimes finds its way along lines of shafting and machinery in such quantities and under such conditions as to cause serious disasters.

Thus lint cotton may be ignited. Mr. Newell relates as follows some notable instances of fires which have been traced to the action of atmospheric electricity:

In the carding room of a cotton mill power was conveyed by an upright shaft crowned with a cog-wheel, which worked into a second cog. No electrical phenomena had ever been noticed in connexion with these wheels. One day, however, during a heavy thunder shower, sparks flashed from the wheels and ignited the "flyings," so that the fire flashed the length of the room. Lightning had not struck the building, nor were any of the hands sensible of a shock. Again, so late as December 26, 1872, a still more remarkable case occurred at the works of the Goodyear India Rubber Glove Manufacturing Co., at Naugatuck, Ct. The season, it will be remembered, was a remarkable one, meteorologically speaking. In Canada severe snow storms had occurred, accompanied by terrific thunder and lightning, and the same phenomena, in modified form, had occurred along our northern border. On the day in question remarkable electrical disturbances had been noticed in the city, people receiving shocks in their own houses when conductors were touched. The weather was cold, and a snow storm was in progress. A workman was engaged at the time in hanging rubber cloths in the steam vulcanizing chamber attached to the works, and he noticed that the electrical "snaps," so common while the cloth passes along the rollers, were singularly loud and frequent. Suddenly, and without any warning, the fire streamed from his hands to the cloth, an explosion followed, and in a moment the building was in flames. This cloth is treated with linseed oil and alcohol, and it is the theory of the superintendent that the vapour of the alcohol was ignited by the electric fire. This, without doubt, was the case.

A new fact was communicated to the French *Académie des Sciences* early in 1875. The workmen at a dye-house at Puteaux had frequently observed after soaking woollen fabrics in a bath of benzine for the purpose of cleaning them, that these fabrics when being wrung out produced loud cracklings, accompanied by small sparks and very sensible prickings of the body and hand of the operator. Finally, in the case of severe rubbing in the process of cleansing a piece of Cashmere stuff, the bath suddenly took fire, burning the workman severely, and destroying the premises. The subject is said to be under the investigation of the *Académie*. We simply give a brief statement of the facts as reported in the *American Builder*. These statements, if substantiated, will materially affect *Dye-House Risks*.

Here is another fact. The insulation of the telegraphic wires in the Western Union Telegraph Office at Cincinnati having become removed (eaten away by mice it was supposed), the wires came in contact at a point where they passed through a pine-wood partition. Some of the large batteries thus became connected in what is technically called a "short circuit," causing heating of wires, and ignition of insulating composition, and then of woodwork. An early discovery of the smoke led to immediate remedy.—1875.

Faulty and Inefficient Construction of Buildings.—We are disposed to think that not only do fires frequently originate from these causes, but also that when they originate in other causes, inefficient construction allows their spread, not only through the building in which they commence, but also to others adjoining. Any one who is familiar with the slipshod mode of construction adopted in regard especially to dwelling-houses must be surprised that fires do not more frequently arise.

The Select Parl. Committee of 1867 says in its Report:

When fires take place from faulty construction of buildings, it is generally in those buildings which have been subjected to alterations, and flues have been made, sun lights placed, stoves erected, and timber laid in ignorance of, or at all events without any reference to the original construction of the building. Thus flues are often made close to some wood hidden in the wall, or the smoke of a new fire-place or stove is led into an old flue. The flues from sun lights have also been carried through floors with great danger and damage to the joists, and ultimately to the whole building; and timber is often placed in close proximity to fireplaces, stoves and flues. Even in new houses the same faults are committed in the mis-placing of timber, and flues, and fireplaces.

The Supt. of the *Glasgow* Salvage Corps (Mr. Goodchild) has for several years paid much attention to fires arising "from the ends of lintels, beams, and other timber having been introduced into vents, from defects in brick or stonework of same, and hearth stones in front of fireplaces being laid on timber instead of on some incombustible material." The result of his observations go to show that, while the per-centage of fires proceeding from these causes is in London 8.709, in Liverpool 11.145, in Manchester 18.729, in Glasgow it reaches the high figure of 35.849. We suspect, however, that his larger results are prob., in some measure at least, due to his more complete investigations. [FLUES.]

Flues.—These will be treated of under their title in the body of the work. It is enough to say here that they are in various ways responsible for a considerable proportion of all the fires which occur. See sub-heading *Faulty, etc., Construction of Buildings*.

Fumigating Rooms, etc.—Many fires have originated in the fumigating of rooms to destroy bugs and other vermin by persons not understanding the care and watchfulness required in the process. Hunting fleas by candle-light is attended with considerable danger. Every flea and bug in the house has been sometimes more effectually exterminated than was contemplated when the sport began.

Gas.—The use of this subtle illuminator, while more safe in most respects than any other known mode of illumination, has at the same time dangers peculiarly its own. It will be further considered in its alphabetical place. (See *Rats*.)

The *Ins. Times* of N.Y. Dec. 1872, offers the following obs. regarding the influence of gas in sustaining combustion:

When a building takes fire supplied with gas, the pipes of course pour out their streams of gas into the flames and feed the fire. This source of conflagration, as almost everybody knows, cannot be extinguished by water. When the building falls in, and even when the burning timbers are

saturated with water, the iron pipes are still emitting under great pressure their combustible contents. Again and again has a fire that the hoseman fondly imagined to be effectually got under, been renewed by the supply of gas flowing unchecked in the ruins. . . Millions of dollars worth of property is thus destroyed, and we believe there is hardly an instance in which the salvage has not been lessened by this cause. The gas cos. ought long ago to have placed stop-cocks in the front of every building lighted by gas, so that the firemen could cut off the supply in a moment. . .

Glass.—Defective glass, containing knots, bull's eyes, etc., has been the cause of many fires, by concentrating the rays of the sun on inflammable substances. See sub-heading *Solar Heat*.

Hot Water Pipes.—Many fires have originated in the curtains and other drapery, and even in the woodwork of houses heated by means of hot water. The cause, which has remained hitherto a mystery, may, perhaps, now be elucidated by the facts given under sub-heading *Iron, Oxide of*. See also *Steam Pipes*. The subject will be further considered under its title in the body of the work.

Iron Filings and Borings.—These, as also scraps of iron, when saturated with oil, as they frequently are, rapidly absorb oxygen, and acquire great heat, sometimes bursting into flames: as was the case at the Winchester Arms Co. in Connecticut a few years since.

Iron, Oxide of.—The following is the result of recent investigation: "When oxide of iron is placed in contact with timber, excluded from the atmosphere, and aided by a slightly increased temperature, the oxide parts with its oxygen, is converted into very finely divided particles of metallic iron, having such an affinity for oxygen that, when afterward exposed to the action of the atmosphere from any cause, oxygen is absorbed so rapidly that these particles become suddenly red-hot, and, if in sufficient quantity, will produce a temperature far beyond the ignitable point of dry timber. Wherever iron pipes are employed for the circulation of any heated medium (whether hot water, hot air, or steam), and wherever these pipes are allowed to become rusty, and are also in close contact with timber, it is only necessary to suppose that under these circumstances the finely-divided particles of metallic iron become exposed to the action of the atmosphere (and this may occur from the mere expansion or contraction of the pipes), in order to account for many of the fires which periodically take place at the commencement of the winter season."—1876.

Iron Pyrites.—The tendency of this substance to ignition has been elucidated under sub-heading *Coals*.

Lampblack.—This substance deserves mention for its incendiary qualities. It is often made from naphthaline, is used by curriers, and boot and shoe makers, and to give to the ink used in copperplate printing its velvety hue. It is dangerous everywhere. It goes into ready partnership with moisture, and quickly begets fire. In Medway, Mass., there have been three fires within the past two years caused by the spontaneous combustion of this substance.—*Hewitt*, 1876.

Lime.—Quicklime stored in barrels, bags, barges, and also in cellars and storehouses, is the cause of many fires. Moisture reaching it causes it to "slack," in which condition it will ignite wood and other inflammable substances. It is believed to be capable of heating metal up to a point of danger when in contact with wood. The Thames hardly ever overflows without causing fires of this character. Captain Shaw mentioned several to the Select Parl. Committee on Fire Protection which sat in 1867.

Locomotive Engines.—Sparks from these have caused many serious fires in country districts. The subject will be considered fully under its alphabetical title in the body of the work.

Matches.—These in all their forms, from the earliest with simple brimstone tips, have been attended with great danger. The general introduction of lucifer matches may be said to have added a new phase of risk to the bus. of fire underwriting. Even the "safety matches," while less liable to accidental ignition, are as dangerous as their predecessors when thrown down carelessly. While the "Swedish matches," hitherto regarded as most safe, now turn out to be very dangerous, by reason of their having been soaked in paraffin oil. If thrown down alight, this oil communicates its inflammability to various objects on which it may fall. See sub-headings *Rats* and *Tapers*.

Monkeys.—That mischievous animal, the monkey, has lent its aid to the devouring element. Fires have occurred through its agency, in a similar manner to cats and dogs, also through its playing with fire in various ways. In one instance a monkey upset a charcoal brazier, and set a room on fire.—*Töser*, 1874.

Nitrate of Potash.—This is now regarded as a dangerous substance, requiring great care in stowage.

Nitrate of Soda.—Originally a belief prevailed that this was a comparatively safe article of commerce. Later experience has shown it to be highly explosive, and therefore dangerous, when brought into combination with any vegetable substance by means of combustion, or by the action of rapid heat. This was one of the main ingredients which led to the explosion which arose out of the Gateshead fire in 1854. [EXPLOSIONS, *Chemical Stores*.]

Nitric Acid.—This it is found will produce fire when coming in contact with vegetable substances. Hence, on the breaking of a carboy, in which it is usually stored and conveyed, the wooden box surrounding it has sometimes been almost instantly set on fire. It

appears that acid marked by manufacturers "40" or "45" is of sufficient strength to produce this result. It was formerly believed that no kind of acid would produce fire by coming in contact with wood. That belief must now be expelled.

Oils.—The increase of fires from the use of mineral oils has of late years been enormous. They will be discussed under the general title OILS. In the *Quarterly Review* for Jan. 1855, was the following: "A porter swept the sawdust from the floor into a heap, upon which the oil (olive) from a broken flask dripped. The sun shone on the heap, and in 16 hours it took fire." See *Solar Heat*.

Pyromania.—The modern designation for persons suffering from an irresistible propensity for fire-raising. The subject is referred to under FIRES CAUSED WILFULLY, date 1874. It will be treated of more in detail under its alphabetical title.

Rats.—In many instances fires have been suspected of being occasioned by rats; but the cases are not easy of verification. The following facts will aid our understanding in the matter.

A Mrs. Bakewell, living in St. Mary's Gate, Manchester, had a kitchen infested with rats. They on several occasions have bitten through the water-pipe; and the pipe so bitten has been exhibited before the Lower Mosely Natural Hist. Soc. in Manchester. The theory is that the rats being thirsty gnawed the pipe to allay their thirst.

Two instances have occurred at Phillips' Warehouse, Church Street, Manchester, one in 1851, the other in 1856; in both cases the rat gnawed through a leaden gas main pipe a few inches above the floor. Other similar instances have occurred of rats gnawing a gas in mistake for a water-pipe; it has been thought they heard the water bubbling in the gas-pipe, and have not found their mistake until they have penetrated the pipe. Phillips' Warehouse was on both occasions damaged by fire through some of the employees seeking for the escaping gas with a light.

Fires have occurred through rats and mice conveying under the flooring boards oily and fatty rags, which have afterwards spontaneously ignited. This is rather a common cause of fires in cotton mills.

The following is an extract from the *Journal* of the United Service Inst., Whitehall Yard, Lond., No. 52, for 1868: "One of the presents sent to the Museum of this Institution is a rat's nest and young. The nest was set on fire by a lucifer match, ignited by the old rat as she worked into her nest. Lieut. A. H. Gilmore, R.N., states that a fire occurred on board H.M.'s ship *Revenge* from a similar cause."

I have attended and traced several instances of fires occurring through rats and mice gnawing lucifer matches. Matches are now dipped in paraffin wax instead of sulphur, as before; the rats or mice have carried them under the floor for the purpose of gnawing off the wax; in doing so, their teeth have come in contact with the phosphorus at the ends, and so fired them. In 1856 I attended a fire at the Sultan's Palace, at Scutari, Asia Minor. After the fire, I gathered from under the flooring a quantity they had been gnawing.—Tozer, in *Science Gossip*, 1874.

Smoking.—A very frequent cause of fires is smoking; but in these cases the true cause is usually concealed or misrepresented. In many of the docks and wharves the taking of pipes upon the premises is strictly prohibited; fines and dismissal being imposed. Smoking watchmen are a very dangerous protection against fire. Our experience for 20 years in active connexion with the fire department has convinced us that 17 fires out of 20 occurring in large buildings guarded by watchmen are attributable to tobacco smoking. The origin of the recent conflagration in Jersey City may reasonably be ascribed to this cause.—*Ins. Times*, N.Y. 1872.

Solar Heat.—The concentration of the rays of the sun by means of powerful glasses specially constructed for the purpose was one of the modes of warfare in ancient times. The vessels of the enemy, when beyond the range of other appliances, could be reached in this manner and destroyed. The principle here specially employed sometimes comes into play unintentionally, but with destructive effect.

A few instances have occurred through the concentration of the sun's rays upon glass fish globes. On the 16 Oct. 1845, at 2 P.M., Mr. Philbrook's residence, Mill Street, Worcester, was set on fire through the concentration of the sun's rays upon a water croft standing upon a table. Coloured bottles in chemists' shops, cracks, and bull's eyes in glass have been known to focus sufficient heat from the sun to set buildings on fire.—*Tozer*, 1874.

In the summer of 1875 the master of the steam-tug *Volunteer*, in Plymouth Sound, found that a large hole had been burned in the centre of the covering of his berth, and that the fire had penetrated to the bed itself, which was smoking. It was then discovered that this resulted from the concentration of the sun's rays by the glass "dead lights" in the side of the vessel.

During the same summer another fire occurred in Devonshire, from a like cause. The grounds of a new mansion at Paignton are entered through gates richly gilt and ornamented. To protect them temporarily they were covered with canvas. One afternoon this covering was found to be on fire, and was burned, one of the lamps above being broken by the heat. All ordinary theories of the causes of fire failed to account for this one, and it was discovered that the globular lamps of the gate concentrated the

solar rays and directed them on the spot where the canvas had been, and thus, doubtless, occasioned the fire.

The sun, too, by drying and raising the temperature of many vegetable substances, as also of thatched roofs and timber buildings, indirectly prepares the way for many serious conflagrations. See *Oils*.

Spontaneous Ignition.—There is no doubt but that a considerable number of fires owe their origin to this cause, resulting in a great variety of circumstances. It has been discussed under title COMBUSTION, SPONTANEOUS; and will be further considered under the general head SPONTANEOUS IGNITION. See also sub-headings *Coals*, *Iron Filings*, and *Rats*, in the present art.

Steam Pipes.—Repeated instances have been observed in which steam has become super-heated without giving any indication from the pressure gage. This is believed to occur whenever the water is allowed to get low enough in the boiler to expose the steam to the heating surfaces. Super-heated steam will in turn communicate its heat to the metal, and ignition may be produced whenever felt, wood, or other inflammable substance comes in contact with any portion of the boiler or steam pipes. Numerous fires have resulted from steam pipes, the solution of which may be found under sub-heading *Iron*, *Oxide of*, even perhaps more readily than in the theory of super-heated steam.

Tapers.—A useful lesson may be learnt from an incident which occurred at Manchester in May, 1874, when an alarm of fire was raised at an office in Cooper Street. A large room was found to be full of dense smoke, and the fire brigade were hastily summoned to the spot. On examination it was found that the smoke had been caused by a large coil of green wax taper, which was still smouldering on the mantel-piece. The person who closed the office on the previous evening had blown out the light, but had not completely extinguished it, and it burned slowly all night, giving out a peculiarly dense smoke. This, it is stated, is the fourth alarm of fire in different parts of Manchester from the same cause, and in each case the taper was of *green wax*. Experiments with white, red, and blue tapers show that they do not smoulder more than a few moments, but that a green taper will burn to the last fragment, and occasionally burst into a flame. The moral to be drawn from this story is, on no account to select a green wax taper for official or domestic use.—*Fall Mall Gazette*.

Timber.—Professor William Hosking, in a learned article on Construction, in the *Ency. Brit.* 8th ed. (1856), says:

It is seldom that houses take fire from common accidents such as occur to the lighter movable furniture and to drapery; but for the most part from the exposure of timber in or about the structure to the continued action of fire, or of heat capable sooner or later of inducing the combustion of timber; and as the source is most commonly in some stove, furnace, flue, pipe, or tube, for generating or conveying heat, or for removing the products of combustion, much of the real danger to buildings from fire would be prevented by avoiding that degree of proximity between timber and all such things as can lead to its combustion.

With a view to lessen the danger to which buildings with timber in their structure are exposed from fire, it will be well to consider how far the timber and wooden fittings commonly used may be necessary either to the stability of the buildings or to comfort and convenience.

So long as danger of fire is brought to buildings through pipes and tubes, the necessity must be admitted of guarding the combustible materials used in buildings from any chance of becoming ignited. When heat is produced and passed through pipes in any manufactory, whether it be to act as power or for drying or for warming, the fires used may be guarded, and the machinery which regulates the intensity of the heat to be transmitted may be under constant care; but even in such cases there can be no certain assurance that the heat shall not at some time arrive at the point of danger as it regards the ignition of combustible substances. But when heat is diffused throughout dwelling-houses by means of apparatus which is committed to persons unskilled in its use, and unconscious or careless of the danger which may arise from neglect, it seems impossible to lay down inflexible rules for distances from timber which shall render it safe from heated pipes. *Twelve or 15 inches may not be a greater distance than safety requires under some circumstances, whilst there are many cases in which the actual contact of such pipes with timber is hardly inconsistent with safety.* When the air about the heated bodies is not confined, as it is between the joists and the floor and ceiling of an ordinary floor, a distance between timber and the heated surface equal to longest diameter of any tube or pipe will be found a safe distance if the temperature of the pipe does not exceed that of boiling water.

It is to be understood at the same time that a piece of wood will bear a powerful dead heat upon its sides for an indefinite period without igniting, unless a transverse section of the fibre, as at or round a live knot, or where a branch has been lopped, present itself to the action. *It is by the end that a piece of wood exposed to powerful heat most readily ignites.* The gases evolved in the substance of the timber by the action of heat applied to its surface expanding as evolved, are thrown out by the pores among the fibres at their ends, if the ends are near enough to the action to allow of this effect, with less power than may be enough to obtain vent for the inflammable gases laterally.

These passages probably contain all that can be said scientifically on the subject.

A fire at Fall River, Massachusetts, was a mystery until Mr. Eddy, who had care of the building, found that in a board just over the pipes were several pitch knots. The turpentine distilled from the knots and fell upon the pipe, and took fire from its heat, and set the building on fire.—*Bird*, Boston, U.S., 1873.

Water.—This is often the means of producing fire. It is directly so in the case of fires produced by quick-lime (see sub-heading *Lime*). Its presence is frequently the cause of combustion in fibrous substances. [COMBUSTION, SPONTANEOUS.] It is believed by many experienced firemen that the oxygen liberated from water when thrown upon large fires in the shape of spray, also adds to the body of flame. In the case of chemicals burning, it has sometimes supplied the only element required. See title EXPLOSIONS, sub-heading *Chemical Stores*.

Wool-Drying.—The Supt. of a wool-drying room in 1866 entered it with his lantern. Soon after leaving he smelt smoke, and opening the room again he found it full of smoke or vapour. As soon as the air was admitted, the fire flashed all over the room at once, as by flashes of lightning. In 1868 a similar fire occurred in another room: "The watchman entered it with his lantern. Leaving it for a moment, he wished to return, but found it full of fire, and was obliged to escape by a window."—*Bird*, Boston, U.S., 1873.

In 1874 a writer in *Engineering News* made the following interesting compilation of facts relating to the origin of fires from unsuspected causes:

BUSINESS.

Churches, including all other places of worship. Also meeting houses and lecture rooms of all descriptions.

Curriers, tanners, and workers in leather and hides of all descriptions.

Drapers, tailors, milliners, mercers, makers up and vendors of male and female attire of all descriptions.

Engineering works and workers in metal of all descriptions.

Farming - stocks, stables, hay, grain, or flour stores, of all descriptions.

Gunpowder, firework, lucifer match, and other manufacturers, and all workers in and makers up of explosive compounds.

Gas works.

Hat manufacturers.

USUAL CAUSES OF FIRE.

Hot air, hot water, and steam pipes, and furnaces and stoves. Sticking candles against coffins in vaults. Christmas and other decorations around or too near gas fittings, fires, or lights. Sparks falling upon birds' nests in spires and belfries.

Lime slacked by rain. Sparks from foul flues and furnaces passing through opening and projecting eaves of drying rooms. Friction of machinery in bark mills. Timber, coal, shavings of wood, and leather too near flues. Drying stoves and furnaces. Spontaneous ignition. Smoking in bark and other rooms.

Working late, being tired and falling asleep, or becoming careless too near fires and lights. Unprotected and swinging gas brackets. Crinolines coming in contact with fire in open fireplaces. Light pendent goods being blown by the opening and shutting of doors or by concussions or draughts into unprotected lights. Goods hung on lines increase the risk in various ways, such as conveying the flame from one end of a room to the other, and when the line breaks down making three separate fires—one at each end and one in the middle at the same time—thus originating 3 distinct fires for each line. Cuttings left carelessly about. Using lights while intoxicated, especially by tailors' workpeople. Ironing stoves, hot plates, smoothing irons, etc., too near and sometimes on timber and goods. Smoking tobacco and matches for lighting it.

Sparks from striking hot metal. Hot metal castings, etc., left too near timber. Heat from furnaces, forges, and smith's hearth and flues. Friction of machinery. Japanners' stoves overheated or defective. Accidents with melted or hot metal. Explosions of blast furnaces. Spontaneous ignition of oily waste, molders, lamps, and other blacks; sawdust or sweepings, and oil; spontaneous heating of iron turnings, etc., when mixed with water and oil.

Stacking hay whilst green. Sparks from passing locomotives, etc. Sparks from steam threshing machines. Sticking candles against walls and timber in barns and stables. Vagrants smoking in stables. Vagrants being refused alms. Firearms used near farming stocks, such as hay-stacks, etc.

Over-heating of drying stoves and explosive mixtures. Dropping lucifers. Unprotected lights. Smoking. Leaving phosphorus uncovered with water. Friction and percussion from nails in boots. Sparks passing through broken windows. The sun's rays being concentrated through bull's eyes, knots, etc., in glass. Defective casks containing gunpowder or other explosive materials. Spontaneous ignition of red fire and such like compositions. Carelessness in the supervision of young children employed. Shavings and chips too near fires and lights.

Hot coke near timber, etc. Seeking for an escape with unprotected lights. Timber too near furnaces, retorts, etc. Lime slacked by rain. Defective fittings and appliances. Spontaneous ignition of coals.

Boiling shellac. Hot irons left on timber and other inflammable things. Defective drying and other stoves. Smoking tobacco.

Mr. Edgar A. Hewitt, of the *Chronicle*, N.Y., in his Address before the Underwriters' Asso. of the South, held at New Orleans, in April, 1876, embodied a very comprehensive review of the causes of fires, of which we have in some degree availed ourselves in the preceding summary. The following passage is characteristic of his style:

There are many new chemical products and processes with which even professional chemists are but indifferently acquainted. Not only is this true of newly discovered substances, but of those

things with which we have been familiar all our lives. All the researches of science have not yet enabled us to explain many of the most ordinary phenomena exhibited in luminous flames. We do not, for example, know what is the relation existing between the chemical composition of an illuminating substance and its illuminating power. We do not even know whether it is the burning particles of solid carbon or of the vapours of hydro-carbon which gives to flame its luminosity. We are in the dark about light. We know so little of the process of combustion, that it is doubtful if any chemist can explain satisfactorily how it is that lampblack is deposited upon porcelain when the same is held in the flame of a burning lamp. It is not strange, therefore, that our experience with the generation of fire is a series of surprises. Things apparently harmless develop wondrous combustibility.

In *France* it is made a condition of all pol. that the insured after a fire shall make a declaration on oath, setting forth (*inter alia*) the precise time of the occurrence of the fire, and of its duration, *the known or presumptive origin of the same*, the means taken to arrest its progress, as well as all other incidental circumstances. [See FIRE INS. POL., *France*, Art. 14.]

There is a like condition in the *German* fire pol.

For statistical comparisons of the ratio of fires from different causes, see FIRES AND FIRE INS., STATISTICS OF.

FIRES, COST OF.—See FIRES AND FIRE INS., STATISTICS OF.

FIRES, GREAT.—We have long felt the want of an historical list of the more important fires of the world, prepared as far as possible from an underwriter's point of view. We now make an attempt in this direction; well knowing the difficulty, if not the impossibility, of rendering the list absolutely complete and trustworthy. The intention is to include only the "important" fires; but they may derive their importance not alone from their magnitude, as will frequently be shown by the circumstances stated in regard to the particular fire under notice. A revision of the list on some future occasion, in the light of further information, will certainly cause some changes in this regard.

The inherent difficulties in preparing such a Table arise in variations in dates by different historians: over-estimates of damage, consequent upon panic writing, etc., etc. We have dealt with these as they presented themselves; we can only hope with reasonable success. The want of further details respecting some of the fires we regard as an historical misfortune. The list itself will form a basis on which to found corrections hereafter.

We have excluded *Theatres* from the Table except where they have been embraced in a general conflagration. They will be given in a separate T. under THEATRES; as also MANSIONS will be given under their alphabetical title. *Ships* burned will only be included exceptionally. *Churches* are dealt with under a separate head as to fires arising within themselves.

CHRONOLOGICAL TABLE OF IMPORTANT FIRES.

The figures at the end of paragraphs refer to preceding or following fires in the same place. By means of these a continuous record is kept up.

B.C.	
1897	<i>Sodom and Gomorrah.</i> —The first fires of which we have any distinct record is the burning of these cities; but they are of a class outside those we shall here have to deal with: "The Lord rained upon Sodom and upon Gomorrah brimstone and fire from the Lord out of heaven; and he overthrew those cities, and all the plain, and all the inhabitants of the cities, and that which grew upon the ground." . . . "And lo! the smoke of the country went up as the smoke of a furnace."—Gen. xix. The land upon which these cities stood, and that round about, still lies unproductive, as it has remained for upwards of 3770 years!
1400	<i>Jerusalem.</i> The Israelites took the city, and set it on fire.
1141	<i>Ephesus</i> (Asia Minor). Burned by the Amazons. (B.C. 356.)
586	<i>Jerusalem.</i> Solomon's Temple burned to the ground by the Chaldean army.
548	<i>Delphi</i> (Greece). The celebrated Temple of the Oracle of the Pythian Apollo burned.
480	<i>Plataea</i> (Greece). This ancient city, mentioned by Homer, burned by the Persians.
479	<i>Athens.</i> Burned by Mardonius.
390	<i>Rome.</i> July 21. Taken and burnt by the Gauls.
362	<i>Antioch</i> (Syria). The capital of the Greek Kings of Syria. Temple of Apollo burned. (A.D. 154.)
356	<i>Ephesus</i> (Asia Minor). Temple burned by the maniac Herostratus on the same day on which Alexander the Great was born. (B.C. 1141, A.D. 262.)
241	<i>Rome.</i> In the Consulate of Manlius Torquatus Atticus II. and Lutatius Cerco, a fire broke out in the Upper City of Rome, and spread as far as the Forum. The Romans thereby lost more wealth in one day than they had got by many victories.— <i>Universal Hist.</i>
215	<i>Rome.</i> Great fire.
212	<i>Rome.</i> Great fire.
146	<i>Corinth</i> (Greece). Destroyed after the famous "Sack" by L. Mummius.
83	<i>Rome.</i> The Capitol destroyed.
50	<i>Rome.</i> Great fire.

- B.C. 48 *Alexandria.* The larger Library destroyed during the occupation by Julius Cæsar. The following is an account of this Library. Ptolemy Soter founded an Academy, or So. of learned men, for the use of whom he made a collection of choice books, which under his successors grew to prodigious bulk, and was reckoned the finest library in the world. It contained 700,000 vols. The Museum and Library were at first in that quarter of the city called Brucium. Afterwards a supplemental library was erected within the Serapæum, called the daughter of the former. In the war which Julius Cæsar waged against the inhabitants of Alexandria, some of the ships which he was obliged, in self-preservation, to set on fire, drifted to the shore, and communicated their flames to the adjoining houses, which, spreading into the Brucium quarter, consumed the noble library which had been the work of so many kings. Seneca says the number of vols. at the time of the fire was 400,000; but A. Gellus says 700,000! The Library of the Serapæum still remained. (A.D. 181.)
- 13-14 *Rome.* In the reign of Tiberius, 50,000 persons were destroyed or maimed by the fall of an amphitheatre, and while that affliction was fresh, a fire broke out on Mount Cælius, which burnt with such rage and violence that it utterly consumed all the houses in that quarter of the city.
- 12 *Rome.* In the year Tiberius triumphed over the Germans, a dreadful fire happened at Rome, which reduced to ashes many stately buildings; it was thought to have been occasioned by the debtors, *with the design to make their escape in that confusion out of the houses of their creditors.* To prevent the like misfortune and disorder for the future, Augustus created new officers, who were permitted on certain days to wear the robe peculiar to magistrates, to have two lictors to attend them, and 600 slaves for the *extinguishing of fires.*—*Univ. Hist.*
- A.D. 59 *Lyons (France).* Reduced to ashes in one night. Nero made a liberal grant to rebuild it. (A.D. 197.)
- 64 *Rome.* July 19-24. Out of 14 regions, 3 only escaped damage or destruction. It is charged by historians that the Emperor Nero fired the city; the fact seems to be that he took no energetic measures to stay its ravages:
 "While Nero was fiddling, Rome was burning."
 He re-built the city with great splendour.
 The fire began among certain shops in which were kept such goods as were proper to feed it, and spread everywhere with such amazing rapidity, that its havoc was felt in distant streets before any measures to stop it could be tried. Beside an infinite number of common houses, all the noble monuments of antiquity, all the stately palaces, temples, porticoes, with goods, riches, furniture, and merchandize, to an immense value, were devoured by the flames, which raged first in the lower regions of the city, and then mounted higher, with such terrible violence and impetuosity as to frustrate all relief. Nero, who was then at Antium, did not offer to return to the city till he heard that the fire was advancing to his palace.—*Univ. Hist.* vol. xv. p. 44.
- 70 *Jerusalem.* Burned by the Romans under Titus; 1,100,000 Jews perished by fire and sword.
 The destruction of Judea is prophesied and described, 2 Pet. iii. 10, 12, by dissolution or consumption of fire. The account given by Josephus is in substance as follows: The Romans fired all into Siloa; the Sicarii, a faction of the city contrary to the zealots, got into vaults, *from whence they fired the city more than the Romans,* and murdered those that escaping the flames fled into the caves. The Romans being entered, threw firebrands, fire-balls, granadoes, and such like instruments of firing cities, then in use, and set the towers on fire, and fired the houses; and many things that were fired were quenched with the blood of the slain, with which the streets flowed. All the night long the fire increased, and in the morning (Sept. 8) all was on fire; and they fired the outward parts of the city. For burning the Temple particularly, the silver plate of the doors being melted, the flame quickly fired the wood, and from thence increased to the next porch; and that day and all the next night the fire increased, till Titus caused the army to quench it: but the sentence of God had already determined that it should be consumed by fire, and so it was. . . . The Temple was burnt, and the priests hanged up; and upon an affront to Titus (refusing to receive or take quarter from him), the soldiers were permitted to plunder and fire all.
- 80 *Rome.* A fire lasted 3 days.
- 154 *Rome.* In the 16th year of the reign of the Emperor Antoninus, this city suffered several calamities: (1) the Tiber overflowed its banks; (2) *this was followed by a fire which consumed a great part of the city;* (3) a famine swept off great numbers of citizens.

- A.D. 154 *Narbonne* (Gaul). City consumed.
- " *Antioch* (Syria). City consumed. (B.C. 362.)
- " *Carthage* (North Africa). The great square consumed by an accidental fire.
- 181 *Alexandria*. The Temple of Serapis, erected by Ptolemy I., burned. (B.C. 48, A.D. 273.)
- 188 *Rome*. Great part of the Capitol, a famous library, and several contiguous buildings, were utterly destroyed by lightning. Eusebius says it consumed whole quarters of the city, and in them several libraries.
- 191 *Rome*. Under Commodus, a fire broke out in the night-time in the celebrated Temple of Peace. It and all the buildings around it were reduced to ashes. That magnificent structure had been raised by Vespasian after the destruction of Jerusalem, and enriched with all the spoils and ornaments of the Temple of the Jews. The ancients speak of it as one of the most stately buildings in Rome. There men of learning used to hold their assemblies, and lodge their writings, as many others did their jewels, and whatever else they had of great value. It was likewise made use of for a kind of magazine for the spices that were brought by the Roman merchants out of Egypt and Arabia: so that many rich persons were at once reduced to beggary, all their valuable effects and treasures being consumed in one night with the Temple. Galencom plains that many of his books were lost by this misfortune. The fire spread with great violence to other quarters of the city, and consumed a great number of stately edifices, among the rest the Temple of Vesta. The Vestals fled to the Palace with the statue of Pallas, which was supposed to have been brought from Troy.—*Hammond's New Troy*.
- 197 *Lyons* (France). Feb. 19. Burned after defeat of Clodius Albinus by Septimus Severus. (A.D. 59.)
- 260 *Bordeaux*. Destroyed. Rebuilt by the Romans.
- 262 *Ephesus* (Asia Minor). The famous Temple of the Goddess Diana was burned by the Heruli and other Gothic tribes. (B.C. 356.)
- 273 *Alexandria*. The larger Library again destroyed—by Aurelian. (181, 640.)
- 393 *Constantinople*. When Theodosius was consul the 14th time, a dreadful fire broke out, which lasted 3 days, and consumed all the public granaries, with many other stately edifices, and great part of the city. (404.)
- 404 *Constantinople*. The Church of St. Sophia, or the "Holy Eternal Wisdom," burned. (393, 465.)
- 465 *Constantinople*. Sept. 2. A violent fire breaking out reduced to ashes 8 of the 14 quarters into which the city was divided. It was not overcome till it had raged with incredible fury for a space of 6 whole days and nights. (404, 532.)
- 532 *Constantinople*. The Cathedral of Sophia and many other public edifices burned during the "Nika" conflicts. (465, 781.)
- 558 *Paris*. Burned.
- 610 *St. Davids* (Wales). Burned.
- 640 *Alexandria*. Dec. 22. The Library of the Serapæum, which had been formed as stated under date B.C. 48, was burned by command of Amar I. after the capture of the city by the Saracens. This Library is said at the time of its destruction to have contained 500,000 MS. vols. In it, too, Cleopatra had deposited 200,000 vols. of the Pergamean Library, which Mark Antony had presented to her. These, with others added from time to time, rendered this Library more numerous and considerable than the former. Though it was plundered more than once during the troubles and revolutions which happened to the Roman Empire, yet it was again and again supplied and enriched, and continued to be of great fame down to the time of its barbarous destruction. The reason for the burning of this Library has been thus stated: If the books contained the same doctrine as the Koran, they could be of no use, because the Koran comprehended all necessary truths: If they contained what was contrary to that book, they ought not to be suffered. Hence they were doomed, and were distributed among the public baths (whereof there was an incredible number in Alexandria) for the purpose of kindling their fires, lasting for many months. The circumstance, though doubted by Gibbon, is now estab. (273.)
- 677 *Rochester* (Kent). City burned (1130).
- 691 *Durham*. Part of city burned.
- 741 *York Minster*. April 23. Destroyed by fire. (1463.)
- 764 *Canterbury*. Nearly destroyed. (1066-7.)
- 781 *Constantinople*. A dreadful fire, which consumed great part of the city, with the Patriarch's Palace, in which were the comments of St. Chrysostom on the Scripture, written with his own hand. (532, 802-7.)

- 798 | *London*. Burned. No details. (893.)
- 802-7 | *Constantinople*. During the usurpation of Basilicas a dreadful fire happened, which soon consumed great part of the city, with the Library, containing 120,000 vols., and the works of Homer, written, it is said, in golden characters on the great gut of a dragon, 120 feet long! (781, 904.)
- 807 | *Peterborough* (England). Burned by the Danes. (1116.)
- 840 | *Capua* (Naples). Captured by the Saracens and burned.
- 889 | *Troyes* (France). Burned by the Normans. (1181.)
- 893 | *London*. Burned. (798, 962.)
- 904 | *Constantinople*. A fire which consumed many stately buildings. (802-7, 1203.)
- 917 | *Cordova* (Spain). Fire raged for 3 days, laying waste much of this beautiful city.
- 962 | *London*. St. Paul's severely injured. (982.)
- 978 | *Cork* (Ireland). The greater part of this city destroyed. (1013.)
- 982 | *London*. The greater part of the city destroyed. (962, 1086.)
- 1003 | *Wilton* (Wiltshire). Burned by the Danes.
- 1004 | *Norwich* (England). Burned by the Danes. (1463.)
- 1005 | *Dublin*. The suburbs burned by Melaghlin, King of Meath. (1190.)
- 1010 | *Northampton* (England). Attacked by the Danes and burned. (1675.)
- 1012 | *Brechin* (Scotland). Supposed to have been the capital of the Kings of the Picts, burned by the Danes. (1645.)
- 1013 | *Cork* (Ireland). Reduced to ashes during a Danish invasion. (978, 1612.)
- 1066 | *Canterbury*. Cathedral suffered by fire. (754, 1067.)
- 1067 | *Canterbury*. Dec. 6. Cathedral again suffered. (1066, 1174.)
- 1069 | *York*. Burned by the Danes. (741, 1137.)
- 1077 | *London*. Aug. 14. In the time of Wm. I. there was a very great fire in London.—*Rapin*. (982, 1086.)
- 1086 | *London*. A fire "which consumed all the houses and churches from the west to the east gate." Regarding this fire we find the following historical note :
This year being the 20 year of the Reign of K. William the Conqueror, so great and lamentable a Fire happened in London, that beginning at Aldgate it burnt down Houses and Churches all the way to Ludgate, together with the stately Fabrick of St. Paul's and the strong Castle called the Palatine Tower, which stood on the West part of the City, towards the little River of Fleet, the stones of which Castle were afterwards employed for the reedifying of St. Paul's in the place where that Old Fabrick stood. Robert Kilwarby, afterwards Bishop of Canterbury, erected that House of Dominicans called by the name of Black-Friers.
There were many other fires this year of which we have no details ; but only this general note : A.D. 1086. The weather was so inclement that in the unusual efforts made to warm the houses, nearly all the chief cities of the kingdom were destroyed, including a great part of Lond. and St. Paul's. (1077, 1087.)
- " | *Lincoln* (England). The Cathedral, founded by Wm. I., was burned. (1123.)
- 1087 | *London*. "The greatest part of that city was burnt down ; as were also most of the chief towns of England."—*City Remembrancer*, 1769. (1086, 1092.)
- " | *Gloucester*. City suffered severely. Wooden houses. (1102.)
- 1091 | *Crowland Abbey* (Lincolnshire). Destroyed. (1142.)
- 1092 | *London*. In the reign of Wm. Rufus, was a great fire, which burnt down great part of Lond. ; and did more damage than the earthquake, a great storm, and the inundation of the sea which covered the lands now called the Goodwin Sands.—*Rapin*.
In his reign also the cities of *Worcester* and *Rochester* were burnt.—*Burnet*. (1135.)
- 1102 | *Winchester* (Hants). City burned.
- " | *Gloucester* (England). Abbey burned. (1087, 1122.)
- 1105 | *Bayeux* (Normandy). Aug. Burned by Henry I. Cathedral much injured.
- 1106 | *Venice*. Greater part of city destroyed.
- 1109 | *Bamberg* (Bavaria). Burned.
- 1113 | *Mons* (France). "In the year of our Lord 1113, in the days of Baldwin the Second, Earl of Hainault and Mons, Earl Baldwin the First's son, a terrible fire broke out in Mons, which reduced almost the whole town to ashes. It lay in ruins until the year 1145."—*History of Mons, Harleian Miscellany*, vol. xi. p. 96.
- " | *Worcester*. City and Castle burned. (1791.)
- 1114 | *Chichester*. May 11. The wooden Cathedral was burned. (1187.)
- 1116 | *Peterborough* (England). Aug. 3. The Monastery burned.
- " | *Bath* (Somerset). Burned. (1137.)
- 1118 | *Nantes* (France). The greater part of town destroyed by accidental fire.
- 1122 | *Gloucester*. Abbey burned. (1102, 1264.)
- 1123 | *Lincoln*. May 9. The city almost burnt down.—*Rapin*. (1086.)
- 1127 | *Como*. Besieged and burned by the Milanese.
- 1130 | *Lisieux* (France). This town, which had joined in the Gallic struggle against Cæsar B.C. 52, was burned by the Britons.

- 1130 *Rochester* (Kent). City burned. (677, 1137.)
Regarding the fires of the early part of this century we find the following :
In the Reign of K. Henry the first [1100 to 1135] in several places of England happened many grievous Fires : For first the City of Chichester with the principal Monastery (a stately building) was wholly burnt down to the ground. Next in London from Westcheap to Aldgate a long tract of Buildings was consumed with Fire. Also *Worcester* and *Rochester* were wholly consumed, even in the King's presence. Then *Winchester*, *Bath*, *Gloucester*, *Lincoln*, *Peterborough* and other places did also partake of this calamity ; that there could be no charging the Fire with any partiality.
- 1135 *London*. Regarding this fire we find the following circumstantial note :
In the year 1135, the First year of the Reign of King Stephen, a Fire began in the House of one Ailwood near unto London Street, which consumed all Eastward to Aldgate, in which Fire the Priory of the Holy Trinity was burnt ; and Westward to St. Erkenwald's Shrine in S. Paul's. " Now it plainly appears by the three foregoing Relations that the greatest part of the City of London in the space of fifty years was three times consumed by Fire, the greatest destruction that ever happened to the said City before or since." (1092, 1137.)
- 1136 *London Bridge*. The wooden structure No. 2 was burned. (1212.)
- 1137 *Dijon* (France). Destroyed.
- " *London*. St. Paul's much damaged. (1135, 1212.)
- " *Rochester*. June 3. The Cathedral burnt.—*Rapin*.
- " *York*. June 4. The whole city with the Cathedral and 39 churches.—*Rapin*.
[York was then and long afterwards the capital of England.] (1069.)
- " *Bath*. June 27. The city burned. (1116.)
- 1140 *Nottingham*. Town burned to ashes.
- 1142 *Crowland Abbey* (Lincolnshire). Destroyed. (1091.)
- 1160 *Alresford* (Hampshire). Totally burned.
- 1171 *Canterbury* (England). The city almost entirely destroyed. (1250.)
- " *Cairo* (Egypt). Partly burned by the inhabitants on the approach of the Crusaders ; foreign occupation avoided.
- 1174 *Canterbury*. Choir of Cathedral. (1171, 1876.)
- 1181 *Troyes* (France). Nearly destroyed. (889, 1524.)
- 1184 *Bruges* (Belgium). Suffered severely. (1215.)
- " *Glastonbury* (Somerset). The town and Abbey consumed.
- " *Grodno* (Poland). Suffered considerably from fire. (1753.)
- 1187 *Chichester*. The Cathedral burned. (1114.)
- 1189 *Carlisle* (England). The whole city, the Abbey, and all the houses belonging to the Friars. (1292.)
- 1190 *Dublin*. Great part of the city destroyed. (1005, 1283.)
- 1191 *Ascalon* (Syria). A city of the Philistines, several times captured by the Crusaders, burned by Saladin this year.
- 1203 *Constantinople*. A dreadful conflagration, occasioned by some Latin soldiers, who, having plundered a mosque which the late Emperor had suffered the Mohammedans to build in the Imperial city, and being on that account attacked by the Turks (who were much superior to them in numbers), set fire to some wooden houses the better to favour their escape. The flame spreading in an instant from street to street, reduced in a short time great part of the city to ashes, with the capacious store-houses that had been built at a vast expense on the quay.—*Verulam*, p. 187. (904, 1633.)
- 1204 *Doncaster* (England). Town entirely destroyed. [CHURCHES.]
- 1209 *Beziere* (France). July 22. Burned after a general massacre ; the Cathedral was destroyed.
- " *Lubin* (Poland). Burned to ashes. (1276.)
- 1212 *London Bridge*. July 10. Many houses burned ; fire extended into Southwark and Priory of St. Mary Overie, and the Chapel of St. Thomas ; more than 3000 persons lost their lives, regarding which we have the following explanation : " An awful fire broke out on the Southwark side of Lond. Bridge ; and by some means, while it was raging, a fire broke out at the other end also, and so hemmed in the numerous crowds who had assembled to help the distressed. The sufferers, to avoid the flames, threw themselves over the bridge into boats and barges ; but many of these sunk, the people crowding into them, and 3000 people were drowned in the Thames." The fire likewise, for want of hands to extinguish it, burned a great part of the city, north and south of the Bridge. (1137, 1633.)
- 1216 *Bruges*. Burnt. (1184, 1230.)
- " *Morpeth* (Northumberland). Burned by its inhabitants out of hatred to King John.
- 1222 *Fondi* (Italy). Burned by the adherents of Frederick II.
- 1230 *Bruges*. Suffered severely. (1215.)
- 1216 *Haddington* (Scotland). Jan. Destroyed by King John of Eng. (1244.)
- 1244 *Haddington* (Scotland). Again burned. (1216, 1355.)
- " *Holy Places* (Palestine). Burned by the Saracens. (1808.)

- 1246 *Lubeck*. The city destroyed.
- 1248 *Cologne* (Germany). The old Cathedral burned.
- 1250 *Canterbury*. A great part of the city, and the Church of St. Mildred, burned.
- 1264 *Gloucester*. June 17. City suffered severely. Wooden houses. (1087.)
- 1270 *Elgin* (Scotland). Town and Cathedral considerably injured. (1390.)
- 1276 *Lubin* (Poland). Again burned. (1209.)
- 1283 *Dublin*. Jan. 2. The greater part of the city, including St. Patrick's Cathedral. (1190, 1362.)
- 1292 *Carlisle*. Destroyed. (1189.)
- 1293 *Cambridge* (Eng.). Great part of the town, with the Church of Our Lady. (1342.)
- 1299 *Westminster*. The King's Palace and Monastery adjoining, and many houses destroyed.
- " *Gloucester* (England). The Monastery of Gloucester burned.
- " *Weimar* (Germany). Destructive fire. (1424.)
- 1308 *Rome*. The Lateran Palace—presented by Constantine I. to the Popes—burned.
- 1321 *Geneva* (Switzerland). City burned. (1333.)
- 1322 *Stockton-on-Tees* (Durham). The town burned by the Scotch.
- 1323 *Memel* (Prussia). Greatly damaged. (1379.)
- 1327 *Munich* (Bavaria). Suffered greatly. (1448.)
- 1333 *Geneva*. Burned again. (1321, 1430.)
- 1341 *Salazzo or Saluces* (Italy). The Abbey of Staffarda burned.
- 1342 *Cambridge* (England). Clare College burned. (1293.)
- 1349 *Newcastle-upon-Tyne*. Burned by accident. (1750.)
- 1355 *Haddington* (Scotland). Burned by Edward III. (1244.)
- 1362 *Dublin*. April 6. St. Patrick's Church destroyed. (1283, 1684.)
- 1377 *Winchelsea* (Sussex). Burned by the French. (1380.)
- " *Hastings*. Burned.
- 1379 *Memel* (Prussia). Large portion of town destroyed. (1323, 1457.)
- 1380 *Winchelsea*. March 13. Burned by the French. (1377, 1449.)
- 1381 *Smithfield* (London). Monastery of St. John, by Wat Tyler's rioters.
- 1385 *Edinburgh*. Burned by Richard II. (1401.) The Abbey of *Holyrood* was also burned. (1544.)
- 1388 *Dunkirk* (France). Burned by the English.
- 1390 *Elgin* (Scotland). Town and Cathedral burned by Earl of Buchan. (1270, 1402.)
- 1399 *Wark Castle* (Cumberland). Burned.
- 1300-1400 *Sleswig* (Denmark). This city suffered several times by fire during this century.
- 1401 *Edinburgh*. Burned by Henry IV. (1385, 1542.)
- 1402 *Elgin* (Scotland). Considerably damaged by Alexander, son of the Lord of the Isles. (1390, 1452.)
- 1405 *Berne* (Switzerland). Destroyed.
- " *Brussels*. A large portion of the city destroyed.
- 1406 *Royston* (Herts). "A fair large market town" was burned. (1747.)
- 1411 *Inverness* (Scotland). June. Burned by Donald, "Lord of the Isles."
- 1420 *Leipsic* (Saxony). About 400 houses destroyed.
- 1424 *Weimar* (Germany). Destructive fire. (1299, 1618.)
- 1430 *Geneva*. City burned. (1333.)
- 1444 *London*. Fire at St. Paul's. See FIRE ANNIHILATORS. (1137, 1561.)
- 1448 *Munich* (Bavaria). Suffered severely from fire. (1327.)
- 1449 *Winchelsea*. Burned by the French. (1380.)
- 1452 *Elgin* (Scotland). Partly burned by Earl of Huntley. (1402.)
- 1457 *Dort* (Holland). Large part of town, including Church of Notre Dame, destroyed.
- " *Forney* (Cornwall). Burned by the French.
- " *Memel* (Prussia). Considerable portion of town destroyed. (1379, 1540.)
- 1463 *York*. The Minster, "one of the fairest and statliest fabricks in Europe," was burnt. (741, 1829.)
- " *Norwich* (England). Christ Church in this city was burned. (1004, 1507.)
- 1471 *London Bridge*. May 14. Houses burned by Falconbridge during his attempt on London. (1212, 1504.)
- " *Chester*. This city nearly destroyed by an accidental fire.
- 1485 *London*. Aug. 20. Bread Street. Great fire, "which burned down several whole streets and divers churches." (1212, 1561.)
- 1491 *Dresden* (Saxony). Destroyed. Speedily rebuilt.
- 1498 *Shyne or Sheen* (Surrey). "In the night suddenly, near to the King's [Henry I.] own lodgings, whereby a great part of the building was consumed, and much costly household stuff: which gave the King an occasion of building from the ground that fine pile of Richmond."—*City Remembrancer*. Chaucer was surveyor of works to this Palace, 1389.

- 1498 *Cashel* (Ireland). Cathedral set on fire by Earl of Kildare.
 1504 *London Bridge*. Nov. 21. Six houses burned. (1471, 1633.)
 1507 *Norwich* (England). 718 houses destroyed. (1463.)
 1508 *Medina* (Arabia). The celebrated Mosque containing the Tomb of the Prophet totally destroyed.
 1512 *Brest* (France). May 23. Burned by Sir Thomas Howard. (1776.)
 " *Westminster*. Palace burned. (1809.)
 1513 *Dixmude* (Belgium). More than 300 houses burned.
 1514 *Brighton*. Pillaged and burned by the French.
 1521 *Oviado* (Spain). Great part of town burned.
 1523 *Fedburgh* (Scotland). Abbey burned by the Earl of Surrey.
 1524 *Troyes* (France). Nearly destroyed. (1181.) [destroyed.]
 1530 *Aalborg* (Jutland). This, the capital of the Peninsula, was almost entirely
 1533 *London*. Salters' Hall, Bread Street, Cheapside. (1598.)
 1534 *Whitehall* (London). The Mews burned; considerable destruction.
 1535 *Klagenfurt* (Illyria). Town severely damaged. (1723.)
 1536 *Cusco* (Peru). Feb. Fire commenced during siege; city nearly consumed.
 " *Delft* (Holland). Nearly destroyed.
 1540 *Memel* (Prussia). Large portion of town destroyed. (1457, 1678.)
 1541 *Aarhus* (Denmark). Nearly destroyed. (1556.)
 1542 *Edinburgh*. Burned by the English. (1401, 1544.)
 1543 *Comorn* or *Komorn* (Hungary). A town of great antiquity, burned by Soliman I. this year.
 1544 *Edinburgh* and also *Leith*. Burned by the English. (1542, 1547.) Also Palace of Holyrood. (1385, 1547.)
 1547 *Leith*. Burned. (1544, 1677.) Palace of *Holyrood* (Edin.) burned. (1544.)
 1553 *Woolwich*. The *Great Harry*, the first ship of the English Royal Navy, built by Henry VII. in 1488, was burned.
 1556 *Aarhus* (Denmark). Again nearly destroyed. (1541.)
 1561 *London*. "The spire of the Cathedral Church of S. Paul's, being 520 Foot from the ground, and 260 from the square steeple, where it was placed, and was made of wooden materials, but covered with lead, was with lightning burnt down, together with the roofs of that large church, and that within the space of five hours: the roofs were afterwards reedified, but not the spire." (1485, 1633.)
 1564 *Armagh*. (Ireland). Burned by Shane O'Neal.
 1570 *Moscow* (Russia). July. The city entirely burnt by the Tartars. A Dutch merchant, who was travelling through Russia on bus., with his interpreter, gives the following account of this fire:
 . . . The Tartarians came and encompassed the town, thinking he [the governor of the province—John Basilides—"the famous tyrant"] was within; they set a-fire all the villages round about it; and seeing that the war would prove too tedious for them, resolved to burn that great city, or at least the suburbs of it. For this purpose, having placed their troops round about it, they set fire on all sides, so that it seemed a burning globe; then did arise so fierce and violent a wind, that it drove the rafters and long trees from the suburbs into the city; the conflagration was so sudden that nobody had time to save himself, but in that place where he was then: the persons that were burnt in this fire were above 200,000; which did happen because the houses are all of wood, and the streets paved with great fir-trees, set close together, which being oily and rosinous, made incendiary unexpressable, so that in four hours time the city and suburbs were wholly consumed. . . . This wonderful conflagration caused all the fortifications of the town-wall to fall, and all the ordnance that were upon it to burst. The walls were made of brick, according to the ancient way of building, without either fortification or ditches. Many that had saved themselves among them [the fortifications?] were nevertheless roasted, so fierce and vehement was the fire. . . .
 This fire had been preceded by a terrible outbreak of *Plague*. For further details see *Harleian Miscellany*, vol. vii. p. 333-4. (1737.)
 1576 *Antwerp*. Nov. 4. Pillaged and burned by the Spaniards. (1858.)
 1577 *Naas* (Ireland). In early times the residence of the Kings of Leinster; between 700 and 800 burned by insurgents on the night of a festival.
 1581 *Marlborough* (Wilts). An important manufacturing town, seriously damaged. (1597.)
 1586 *Beccles* (Suffolk). Nov. 29. 80 houses burned. Damage £20,000.
 1597 *Marlborough*. Town nearly destroyed. (1581, 1653.)
 1598 *London*. Salters' Hall again burned. (1533.)
 " *Tiverton* (Devonshire). The town almost destroyed; over 400 houses burned, 33 lives lost, many horses sacrificed, and property damaged to the value of £150,000. (1612.)
 1608 *Bury St. Edmunds*. A large portion of the town destroyed.
 1612 *Cork* (Ireland). Great part of city destroyed. (1013, 1622.)
 " *Tiverton* (Devon). Again burned; 600 houses destroyed; damage £200,000. (1598, 1731.) There was pub.: *Wofull Newes from the West Parts of England of the lamentable burning of Tiverton, with frontispiece*.—Lowndes.

- 1613 *Dorchester* (England). Nearly destroyed; 300 houses and 2 churches burned; loss £200,000. Fire originated at tallow-melter's. (1662.)
- " *Melton Mowbray* (Leicestershire). Town considerably damaged.
- 1614 *Stratford-on-Avon*. Town burned. [Shakespeare's house not destroyed.]
- 1616 *Carlstad* (Sweden). Suffered severely. (1660.)
- 1618 *Waimar* (Germany). Destructive fire. (1424, 1774.)
- 1619 *Whitehall* (London). Jan. 12. The old Banqueting Hall destroyed. (1691.)
- 1622 *Cork*. Considerable part of city destroyed. (1612.)
- 1624 *Oslo* (Norway). May 24. City destroyed; *Christiania* built on its site. (1858.)
- 1631 *Westminster Hall*. Feb. 20. Checked in time to prevent serious destruction.
- " *Rajmahal* (Hindustan). A large portion of the town burned, and the splendid Palace greatly injured.
- " *Magdeburg* (Germany). May 10. This city was taken by storm, and shortly afterwards a fire broke out and burned it entirely, with the exception of 139 houses. It was estimated that 20,000 people were killed, burned or smothered, etc., whereof 6000 were drowned in the Elbe.
- " *Sezanne* (France). A town of considerable importance, reduced to ashes. "Upon a Sunday morning a woman that kept a chandler's shop, having occasion to snuff a candle, threw the snuff into the corner of her shop, among some old rags and papers, and so shutting the door, went to mass; but within the space of half an hour, and before she could come back again, not only her house, but those of her neighbours were all in a flame, which being helped by an east wind, which blew at that time, and which is the most dangerous of all the winds for incendies, as we shall show hereafter, did in the space of a day and a night consume the whole town, consisting of about 400 houses."—*Harleian Miscellany*. The writer asks: "Can this be called a mere accident, since there is nobody so void of common sense, but might have either foreseen or prevented so calamitous a consequence?"
- 1633 *London Bridge*. Feb. 13. More than a third of the houses destroyed. (1471, 1725.) It was on this occasion that fire engines were first used in Eng. [FIRE ENGINES, MANUAL.]

On Monday the 13 of February, 1633, a Fire began in the House of one Mr. Briggs (at the hither end of London Bridge), a Needlemaker, between the hours of 11 & 12, towards midnight, which burnt down in both sides the way from S. Magnus to the first open place, where 42 houses with the greatest part of the wares, goods, and rich furniture on them were devoured by that Raging Element before 8 a clock next morning.

The following account of this fire is from the *Wallington Journal*, MS., Guildhall Library (pp. 479-482):

One the 11th day of February (being Monday, 1663), began by God's just hand a fearefull fire in the house of one John Briggs neere tenn of the Clocke att night, it burnt down his house and the next house with all the goods that were in them and as I heere that Briggs his Wife and Child escaped with their lives verily hardly having nothing on their bodies but their Shurt and Smoke: and the fire burnt so fearefully that it could not be quenched till it had burnt downe all the houses on both sides of the way from S. Magnes Church to the first open place. And although there was water enough very neere, yet they could not safely come at it, but all the Conduittes neere were opened and the pipes that carried watter through the streets were cutt open, and ye watter swept down with broomes with helpe enough, but it was the will of God it should not prevaile. And the hand of God was the more seene in this inasmuch as no meanes would prosper. For the Engines which are such excellent things, that nothing that ever was devised could do so much good: yett none of theese did prosper for they were (all) broken, and ye tide was verie low; that they could get no watter and the pipes that cutt yelded but littel watter; some ladders were broke to the hurt of many for some had their legges broke, some their armes and some their ribes were broke and many lost their lives. This fire burnt firclly all night and part of the next day (for my man was there about twelve a Cloke, and he said he did [see] the Swedest house on fire) till all was burnt and pulled down to the ground, yett the timber and wood and coales in the Sellers could not be quenched all that weeke: till the tuesday following in the afternoon the xix of February, for I was there then my Selfe and had a live cole of fire in my hand, and burnt my finger with it.

Notwithstanding there were as many night and day as could labour one by another to carry away Timber & Bricks, and tiles and rubbish cast downe into the liters, so that on Wensday the Bridge was cleared that passengers might goe over.

At the beginning of this fire As I lay in my Bed and heard ye sweeping of the channels and crying for water-water, I arose about one of the Cloke and looked downe Fish street hill and did behold such a fearefull and dreadfull fire, vaunting itself over the tops of houses like a Capitaine flourishing and displaying his banner, and seing so much meanes and little good it did make me thinke of that fire which the Lord threatneth against Jerusalem for the breach of his Sabbath-day.

He saith thus: "But if ye will not hear me to sanctifie the Sabbath-day, and to beare no burden nor to goe through ye gattes of Jerusalem in the Sabbath-day, Then will I kindle a fire in ye gates thereof, and it shall devour the palaces of Jerusalem, and it shall not be quenched: Iere. xlvii. 27."

I did heere that one the other side of ye Bridge the bruers brought abundance of watter in vessals on their draies which did with the blessing of God much good.

And this mircie of God I thought on, yt there was but littel wind, for had ye wind bin as high as it was a weeke before I thinke it would have indangered ye most parte of the Citie, for in Themes Street there is much pitch-tarre, rosen and oyle in their houses; Therefore as God remembers mercy in iustice, let us remember thankfullnes in Sorrow.

Therefore I will praise the Lord with my whole heart, and I will speak of all thy marvelous workes. For it is Lord's mercy that wee are not consumed. Lam. iii.

1633

The Names and trades, and number of the houses burnt upon the Bridg Heere you may see under nethe:

1	Mr.	William	Vynor	Haberdasher of Smalwares	I.
2	Mr.	John	Broome	Hosier	II.
3	Mr.	Arthur	Lee	Haberdasher of Smalwares	III.
4	Mrs.	Johane	Broome	Hosier	IV.
5	Mr.	Ralph	Panne	Shewmaker	V.
6	Mr.	Abraham	Marten	Haberdasher of hatts	VI.
7	Mr.	Jeremiah	Champney	Hosier	VII.
8	Mr.	John	Terrill	Silkeman	VIII.
9	Mr.	Ellis	Midmore	Milliner	IX.
10	Mr.	Francis	Finch	Hosier	X.
11	Mr.	Andrwe	Bouth	Haberdasher of Smalwares	XI.
12	Mr.	Samuel	Petty	Glover	XII.
13	Mr.	Volentin	Beale	Mercer	XIII.
14	Mrs.		Chambers	Senior	XIV.
15	Mr.	Jeremiah	Chamley	Silkeman	XV.
16		Blew	Cote empti		XVI.
17	Mr.	John	Gouer	Stillier of Strong Waters	XVII.
18	Mr.	John	Wilding	Junior Girdler	XVIII.
19	Mr.	Daniel	Conney	Silkeman	XIX.
20	Mr.	Stephen	Beale	Lynning draper	XX.
21	Mrs.	Jane	Langham	Mercer	XXI.
22	Mr.	James	Dunkin	Wolling draper	XXII.
23	Mr.	Marthew	Harding	Salter	XXIII.
24	Mr.	Abraham	Chambers	Haberdasher of Smalwares	XXIV.
25	Mr.	Lyne	Daniell	Haberdasher of hattes a double house	XXV.
26					XXVI.
27	Mrs.		Brookes	Glover	XXVII.
28	Mr.		Couerley	Hosier	XXVIII.
29	Mr.	John	Danshield	Grocer	XXIX.
30	Mr.		Newman	emptie	XXX.
31	Mr.	Edward	Warnett		
32	Mr.	Samuel	and Wood partoners	Haberdasher of Small Wares	XXXII.
33	Mr.	John	Greeno	Haberdasher of hattes	XXXIII.
34	Mr.	Heugh	Powel	Haberdasher of hattes	XXXIV.
35	Mr.	Samuel	Armitag	Haberdasher of Small Wares	XXXV.
36	Mr.	John	Sherley	Haberdasher of Small Wares	XXXVI.
37	Mr.	John	Lawrymore	Grocer	XXXVII.
38	Mr.	Timothy	Drake	Woolling draper	XXXVIII.
39	Mr.	John	Briggs	Needlemaker	XXXIX.
40	Mr.	Richard	Shelbuery	Scrivener	XL.
41	Mr.	Edwrd	Greene	Hosier	XLI.
42	Mr.		Hazard	The Curate } at S. Magnes }	XLII.
43	Mr.		Hewlett	Clarke } Cloister }	XLIII.

- Constantinople. It is stated in Dallaway's *Travels in the Levant*, that during this year 70,000 houses were burnt! This statement appears to involve some error, which we have no means of rectifying. (1203, 1665.)
- 1634 *Furth* (Bavaria). Burned by the Austrian Croats. (1680.)
- 1637 *London*. Strand, near Arundel House. The good services rendered by the newly-introduced fire engines here, induced Charles I. to write to the Lord Mayor the letter we have set out under FIRE ENGINES, MANUAL, at this date.
- 1643 *Birmingham*. Besieged and partly burned by Prince Rupert. (1817.)
- 1644 *Beaminster* (Dorsetshire). In 2 hours 144 houses were burnt down. (1684.)
- 1645 *Brechin* (Scotland). Burned by Montrose. (1012.)
- " *Lowestoft* (Suffolk). March 10. Much damage done.
- " *Londonderry*. The Crannoge [fortified islands of antiquity] of Loughinsholin was destroyed by fire.
- 1648 *Acapulco* (Mexico). A fire broke out in the Church of St. Nicholas, which in a few hours reduced the town to ashes.
- 1652 *Deptford* (Kent). Town suffered severe damage. (1749.)
- 1653 *Marlborough* (Wilts). April 28. This fire is known as the "Great Fire of Marlborough." 224 houses, one church, and the market-house were destroyed, besides out-houses and other buildings. The loss was ascertained to be £80,000 of the then money. The town at that date was one of considerable importance, and had merchants of affluence and repute. Weaving was carried on, prob. of silk and other costly materials. "Briefs" were issued for a national collection in aid of rebuilding the town. Cromwell headed the subs. list with the princely sum of £2000. We do not find any record of the amount actually collected. We give a copy of the Brief issued, under FIRE BRIEFS.
- An account of this fire was pub. under the title of *Take Head in Time*, written by L. P. and printed for F. Grove, 1653. The writer compares the street of Marlborough to Cheapside, and declares that "no braver wares were to be had or bought in Lond. than in this famous town of Marlborough." The town was of "very good order and government."

- 1653 The articles consumed are specified as "brass and pewter, gold and silver melted, the value whereof could not be made known, silks, taffetas, wool," etc. The fire was fatal to six individuals—four of whom were "Dutchmen"—artificers. The man on whose premises the fire commenced had "been recently guilty of the extravagant pretension of assuming the name of the Messiah."
- In *Heath's Chronicle* there occurs the following passage: "The town of Marlborough was reduced almost to ashes on the 28th April [1653]. An ominous commencement of this incendiary's [Cromwell's] usurpation, whose red and fiery nose was the burden of many a Cavalier's song."
- In the famous *Diary of Sir John Evelyn* there occurs the following passage: "9 June [1654]. Set out in a coach and six to visit my wife's relations in Wiltshire. Dined at Marlborough, which having been lately fired, was now rebuilt." (1597, 1679.)
- 1656 *Jedo* (Japan). August. Sudden fire, which in two days consumed the whole City, "of above 100,000 houses," together with a vast number of stately palaces, and Pagods, or Pagan Temples.
- 1660 *Carlstad* (Sweden). Suffered severely. (1616, 1719.)
- 1662 *Dorchester*. Another very considerable fire. (1613.)
- 1665 *Constantinople*. July 16. The Grand Seignior's Seraglio burned to the ground. In November of this year another fire committed great destruction. (1633, 1679.)
- 1666 **LONDON, GREAT FIRE OF.** Sept. 2nd. This event constitutes one of the main landmarks in the hist. of FIRE INS. In Gt. Brit. this branch of Ins. had certainly not been practised previously, although various attempts had been made to introduce it. It is difficult to say when it would have been adopted here, but for this fire. We propose to review its circumstances in some detail.
- The fire began at the house of one Faryner, "the King's Baker," in Pudding Lane, at a distance of 202 ft.—the exact height of the column—to the eastward of the present Monument, late on the night of Saturday, or early in the morning of Sunday, the 2nd Sept. (the *Gazette* of Sept. 3rd, in its official announcement, says it commenced at 2 o'clock on the 2nd), and it continued for 4 days; during which period it laid waste 400 streets containing 13,200 houses, in add. to St. Paul's Cathedral and 89 churches. It also destroyed the following public buildings: Custom House, Doctors Commons, Fleet Prison, Guildhall (partly), Haberdashers' Hall, Royal Exchange, Sion College, Stationers' Hall, the north end of London Bridge slightly, and the City Gates. Its progress was ultimately stayed by the blowing up of a number of houses, in the direction of its lines of march.
- Its ravages extended from the Tower to the Temple Church; and from the north-east Gate to Holborn Bridge. This area embraced 436 acres. Out of the 26 Wards in the City it destroyed 15, "leaving the remainder scorched, ruinous, and uninhabitable."
- The total damage resulting from the fire, as estimated by competent authorities, and including not only the buildings, but furniture and stock-in-trade, amounted to £10,716,000. This estimate included the value of St. Paul's Cathedral, which Hone says was set down at one-fifth of the whole amount. Mr. Overall states that the contents of the buildings were valued at £1,600,000. All questions of dispute consequent upon the conflagration were referred to a special tribunal for prompt adjudication. [FIRE DECREES.] But as there was no ins., there could be no questions of value of this character; and an action against the baker for negligence was out of the question in a case of such magnitude; the only points which really arose were those of boundaries, with perhaps an occasional question between landlord and tenant as to restoration.
- The following is an extract from the certificate of the surveyors soon after appointed to survey the ruins:
- "That the Fire that began in London upon the second of September, 1666, at one Mr. Farryner's House, a Baker in Pudding Lane, between the hours of one and two in the Morning, and continued burning until the sixth of that Month, did overrun the space of three hundred and seventy-three Acres within the Walls of the City of London, and sixty-three Acres three Roods without the Walls. There remained seventy-five Acres three Roods standing within the Walls unburnt. Eleven Parishes within the Walls standing. Houses burnt, Thirteen thousand two hundred. (Signed) Jonas Moore, Ralph Gatrix, Surveyors."
- It is very difficult, if not impossible, to find in any of the many accounts which have been written of this fire, a succinct view of its progress; such a one as will bring up to our mental vision a true idea of the event. The

thoroughfares of the old city we know were very narrow; the houses were chiefly composed of wood and plaster, and many of them still had thatched roofs. Then there had been a season of great drought; and at the time of the breaking out of the fire, or soon after, there was a brisk wind. Need we wonder, then, that the progress of the fire was very rapid? Dryden, in his *Annus Mirabilis*, written partly in commemoration of the event, says:

Now down the narrow streets it swiftly came,
And widely opening did on both sides prey.

We are informed by contemporary authority that the Lord Mayor (Sir Thomas Bludworth), on whose presence of mind and energetic conduct so much depended, was a person totally disqualified to act the part required of him. But the same authority says: In singular opposition to the conduct of this feeble and affrighted functionary was that of Charles the Second, who, under the trying circumstances in which he was placed, acted sensibly, nobly, and energetically; issuing the wisest directions, as well to preserve order, as to ameliorate the miserable condition of the houseless and starving inhabitants: giving orders for pulling down houses in all directions to prevent the further progress of the flames; and himself passing the four fearful days, sometimes on horseback and sometimes on foot, in visiting the points where the fire raged most fiercely, encouraging the workmen by his presence, and exhorting them to increased exertions by promises, examples or threats.

According to a contemporary MS. quoted by Echard: "All own the immediate hand of God, and bless the goodness of the King, who made the round of the fire usually twice every day, and for many hours together, on horseback and on foot, gave orders for pursuing the work by threatenings, desires, example and good store of money, which he himself distributed to the workers, out of a hundred pound bag, which he carried with him for that purpose." The Duke of York, afterwards James II., followed the example, set him by his royal brother, with similar alacrity, good feeling and zeal.

The non-activity of the Lord Mayor appears to have extended itself to the citizens generally. The Rev. T. Vincent, a well-known preacher of that day, and an eye-witness of the fire, wrote: "The conflagration was so universal, and the people so astonished, that from the beginning, I know not by what despondency or fate, they hardly stirred to quench it; so that there was nothing heard or seen but crying out and lamentation; running about like distracted creatures, without at all attempting to save even their goods; such a strange consternation was there upon them."—*God's Terrible Advice to the City by Plague and Famine*.

By far the best idea, not only of the fire, but of the scene the City presented on the occasion, is to be obtained from the Diaries of Pepys and of Evelyn, who were not only personally present, and had abundant means of information, but were competent to appreciate the greatness of the calamity, and had the ability to record their impressions in appropriate and simple language. Pepys, who was Sec. of the Admiralty, was residing at the time in Seething Lane, Crutched Friars, quite near the spot where the fire commenced, and under date 2nd Sept. 1666, writes:

(Lord's day.) Some of our maids sitting up late last night to get things ready against our feast to-day, Jane called us up about 3 in the morning, to tell us of a great fire they saw in the City. So I rose, and slipped on my night-gown, and went to her window, and thought it to be on the back-side of Marke Lane at the farthest; but, being unused to such fires as followed, I thought it far enough off; and so went to bed again, and to sleep. About 7 rose again to dress myself, and then looked out of the window, and saw the fire not so much as it was, and further off. So to my closet to set things to rights, after yesterday's cleaning. By and by Jane comes and tells me that she hears that above 300 houses have been burned down to-night by the fire we saw, and that it is now burning down all Fish Street by London Bridge. So I made myself ready presently, and walked to the Tower; and then got up on one of the high places, Sir T. Robinson's little son going up with me; and there I did see the houses at that end of the bridge all on fire, and an infinite great fire on this and the other side the end of the bridge; which among other people did trouble me for poor little Michell and our Sarah on the bridge. So down, with my heart full of trouble, to the Lieut. of the Tower, who tells me that it began this morning in the King's baker's house in Pudding Lane, and that it hath burned down St. Magnus's Church, and most part of Fish St. already. So down I went to the water-side, and there got a boat, and through London Bridge, and there saw a lamentable fire. Poor Michell's house, as far as the Old Swan, already burned that way, and the fire running further, that, in a very little time, it got as far as the Steele-yard, while I was there. Everybody endeavouring to remove their goods, and flinging them into the river, or bringing them into lighters that lay off; poor people staying in their houses as long as till the very fire touched them, and then running into boats, or clambering from one pair of stairs, by the waterside, to another. And among other things, the poor pigeons, I perceive, were loth to leave their houses, but hovered about the windows and balconys, till they burned their wings and fell down. Having staid, and in an hour's time seen the fire rage every way; and nobody, to my sight, endeavouring to quench it, but to remove their goods, and leave all to the fire; and having seen it got as far as the Steele-yard, and the wind mighty high, and driving it into the City; and everything, after so long a drought, proving combustible, *even the very stones of churches* [the same feature was observed in the great *Chicago* fire, 1871]; and among other things, the poor steeple by which pretty Mrs. — lives, and whereof my old school-fellow Elborough is Parson, take fire in the very top, and there burned till it fell down; I to White Hall, with a gentleman with me, who desired to go off from the Tower, to see the fire, in my boat; and there up to the King's closet in the Chapel, where people came about me, and I did give them an account [which] dismayed them all, and word was carried in to the King. So I was called for and did tell the King and the Duke of York what I saw; and that unless His Majesty did command houses to be pulled down, nothing could stop the fire. They seemed much troubled, and the King commanded me to go to my Lord Mayor from him and command him to spare no Houses, but to pull down before the fire every way. The Duke of York bid me tell him that if he would have any more soldiers he shall; and so did my Lord Arlington

afterwards, as a great secret. Here meeting Capt. Cocke, I in his coach, which he lent me, and Creed with me to Paul's; and there walked along Watling Street as well as I could, every creature coming away laden with goods to save, and here and there sick people carried away in beds. . . . At last met my Lord Mayor in Canning Street, like a man spent, with a handkerchief about his neck. To the King's message, he cried, like a fainting woman, "Lord! what can I do? I am spent: people will not obey me. I have been pulling down houses; but the fire overtakes us faster than we can do it." That he needed no more soldiers; and that for himself, he must go and refresh himself, having been up all night. So he left me and I him, and walked home; seeing people all almost distracted, and no manner of means used to quench the fire. The houses too, so very thick thereabouts, and full of matter for burning, as pitch and tar in Thames St.; and warehouses of oyle, and wines and brandy and other things. Here I saw Mr. Isaac Houlton, the handsome man, prettily dressed, dirty, at his door, at Dowgate, receiving some of his brother's things, whose houses were on fire; and, as he says, have been removed twice already; and he doubts, as it soon proved, that they must be in a little time removed from his house also, which was a sad consideration. And to see the churches all filling with goods, by people who themselves should have been quietly there at this time. By this time it was about 12 o'clock, and so home, and there find my guests. . . .

Soon as dined, I and Moore away, and walked through the City, the streets full of nothing but people; and horses and carts laden with goods, ready to run over one another, and removing goods from one burned house to another. They now removed out of Canning Street, which received goods in the morning, in Lombard Street, and further; and among others I saw my little goldsmith Stokes receiving some friends' goods, whose house itself was received the day after. . . . Again to see the fire, which was now got further, both below and above, and no likelihood of stopping it. Met with the King and the Duke of York in their barge, and with them to Queenhithe, and there called Sir Richard Browne to them. Their order was only to pull down houses apace, and so below bridge at the water-side; but little was or could be done, the fire coming upon them so fast. Good hopes there was of stopping it at the Three Cranes above, and at Buttolphs Wharf below bridge, if care be used; but the wind carries it into the City, so as we know not, by the water-side, what to do there. River full of lighters and boats taking in goods, and good goods swimming in the water. . . . Having seen as much as I could now, I away to White Hall by appointment, and there walked to St. James' Park; and there met my wife and Creed, and Wood and his wife, and walked to my boat; and there upon the water again, and to the fire up and down, it still encreasing, and the wind great. So near the fire as we could for smoke, and over the Thames, with one's face in the wind, you were almost burned with a shower of fire-drops. This is very true: so as houses were burned by these drops and flakes of fire, three or four, nay, five or six houses one from another. When we could endure no more upon the water, we to a little ale-house on the Bankside, over against the Three Cranes, and there stayed till it was dark almost, and saw the fire grow; and as it grew darker appeared more and more; and in corners and upon steeples, and between churches and houses, as far as we could see up the hill of the City, in a most horrid, malicious, bloody flame, not like the fine flame of an ordinary fire. . . . We staid till it being darkish, we saw the fire as only one entire arch of fire from this to the other side the bridge, and in a bow up the hill for an arch of above a mile long; it made me weep to see it. The churches, houses and all on fire and flaming at once; and a horrid noise the flames made, and the cracking of houses at their ruine. So home with a sad heart, and there find everybody discoursing and lamenting the fire; and poor Tom Hater came with some few of his goods saved out of his house, which was burned upon Fish Street Hill. I invited him to lie at my house, and did receive his goods; but was deceived in his lying there, the news coming every moment of the growth of the fire; so as we were forced to begin to pack up our own goods, and prepare for their removal; and did by moonshine and warm weather carry much of my goods into the garden; and Mr. Hater and I did remove my money and iron chests into my cellar, as thinking that the safest place. And got my bags of gold into my office, ready to carry away, and my chief papers of accounts also there, and my tallies into a box by themselves. So great was our fear, as Sir Wm. Batten hath carts come out of the country to fetch away his goods this night. We did put Mr. Hater, poor man! to bed a little; but he got very little rest, so much noise being in my house, taking down of goods.

Now let us turn from the worldly Pepys to "pious Evelyn," and see what were his experiences. Under "2nd Sept." he says: "This fatal night, about ten, began the deplorable fire near Fish Street, in London." This difference in time—although only of a few hours—makes the fire date from Saturday, Sept. 1st. But it is spoken of by nearly all other authorities as commencing on the 2nd Sept. He proceeds:

I had public prayers at home [people had hardly yet gone back to the churches since the cessation of the Plague]. The fire continuing, after dinner, I took coach with my wife and son, and went to the Bankside in Southwark, where we beheld that dismal, the whole City is in dreadful flames near the water-side; all the houses from the Bridge, all Thames Street, and upwards towards Cheapside, down to the Three Cranes, were now consumed; and so returned exceeding astonished what would become of the rest.

Second Day.—We thus close the first day of this memorable fire. The second (3rd Sept.) we will allow Evelyn to open:

The fire having continued all this night (if I may call this night which was light as day for ten miles round about, after a dreadful manner) when conspiring with a fierce eastern wind in a very dry season; I went on foot to the same place, and saw the whole south part of the City burning from Cheapside to the Thames, and all along Cornhill (for it likewise kindled back against the wind as well as forward), Tower Street, Fenchurch Street, Gracious [now Gracechurch] Street, and so along to Baynard's Castle, and was now taking hold of St. Paul's Church, to which the scaffold contributed exceedingly. . . . So as it burned both in breadth and length, the churches, public halls, exchange, hospitals, monuments or ornaments, leaping after a prodigious manner, from house to house, and street to street, at great distances one from the other; for the heat, with a long set of fair and warm weather, *had even ignited the air* [the same appearance was noticed in *Chicago*, 1871, and attributed to gas escaped from its holders!], and prepared the materials to conceive the fire, which devoured, after an incredible manner, houses, furniture, and everything. Here we saw the Thames covered with goods floating, all the barges and boats laden with what some had time and courage to save, as on the other side, the carts, etc., carrying out to the fields, which for many miles were strewn with movables of all sorts, and tents erecting to shelter both people and what goods they could get away. Oh, the miserable and calamitous spectacle! such as haply the world had not seen since the foundation of it, nor can be outdone till the universal conflagration thereof. All the sky was of a fiery aspect, like the top of a burning oven, and the light seen above 40 miles round about for many nights. God grant mine eyes may never behold the like, who now saw above 10,000 houses all in one flame! The noise and cracking and thunder of the impetuous flames, the shrieking of women and children, the hurry of people, the fall of towers, houses, and churches, was like a hideous storm, and the air all about so hot and inflamed, that at last one was not able to approach it, so that they were forced to

stand still, and let the flames burn on, which they did for near 2 miles in length and one in breadth. The clouds, also, of smoke were dismal, and reached upon computation near 50 miles in length. Thus I left this afternoon burning, a resemblance of Sodom, or the last day. It forcibly called to my mind that passage—*non enim hic habemus stabilem civitatem*: the ruins resembling the picture of Troy. London was, but is no more! Thus I returned.

We shall now see how Pepys was engaged during this the second day of the burning:

3rd. About 4 o'clock in the morning my Lady Batten sent me a cart to carry away all my money, and plate, and best things, to Sir W. Rider's, at Bodnall Greene, which I did, riding myself in my night-gown in the cart; and Lord! to see how the streets and the highways are crowded with people running and riding, and getting of carts at any rate to fetch away things. I find Sir W. Rider tired with being called up all night, and receiving things from several friends. His house full of goods, and much of Sir W. Batten's and Sir W. Pen's. I am eased at my heart to have my treasure so well secured. Then home, and with much ado to find a way, nor any sleep all this night to me nor my poor wife. But then all this day, she and I and all my people labouring to get away the rest of our things, and did get Mr. Tooker to get me a lighter to take them in, and we did carry them, myself some, over Tower Hill, which was by this time full of people's goods. . . . The Duke of York did come this day to the office and spoke to us, and did ride with his guard up and down the City to keep all quiet, he being now General, and having the care of all. . . . At night lay down a little upon a quilt of W. Hewer's in the office, all my own things being packed up or gone; and after me my poor wife did the like, we having fed upon the remains of yesterday's dinner, having no fire nor dishes, or any opportunity of dressing anything.

Third Day.—We now reach the third day, and we will again let Evelyn report on the fire's progress:

4th. The burning still rages, and it was now gotten as far as the Inner Temple; all Fleet Street, the Old Bailey, Ludgate Hill, Warwick Lane, Newgate, Paul's Chain, Watling Street, now flaming, and most of it reduced to ashes; the stones of St. Paul's flew like grenades; the melting lead running down the streets in a stream, and the very pavements glowing with fiery redness, so as no horse, nor man, was able to tread on them, and the demolition had stopped all the passages, so that no help could be applied. The eastern wind still more impetuously driving the flames forward. Nothing but the Almighty power of God was able to stop them; for vain was the help of man.

We now turn to Pepys:

4th. Up by break of day, to get away the remainder of my things; which I did by a lighter at the Iron Gate: and my hands so full, that it was the afternoon before we could get them all away. Sir W. Pen and I to the Tower, and there met the fire burning, three or four doors beyond Mr. Howell's, whose goods, poor man, his trays and dishes, shovells, etc., were flung all along Tower Street in the kennels, and people working therewith from one end to the other: the fire coming on in that narrow street, on both sides, with infinite fury. Sir W. Batten not knowing how to remove his wine, did dig a pit in the garden, and laid it in there; and I took the opportunity of laying all the papers of my office that I could not otherwise dispose of. And in the evening Sir W. Pen and I did dig another, and put our wine into it; and I my parmazan cheese, as well as my wine and some other things. The Duke of York was at the office to-day, at Sir W. Pen's, but I happened not to be within. This afternoon sitting melancholy with Sir W. Pen in our garden, and thinking of the certain burning of this office without extraordinary means, I did propose for the sending up of all our workmen from the Woolwich and Deptford Yards, none whereof yet appeared, and to write to Sir W. Coventry to have the Duke of York's permission to pull down houses, rather than lose this office, which would much hinder the King's business. So Sir W. Pen went down this night, in order to the sending them up to-morrow morning; and I wrote to Sir W. Coventry about the bus., but received no answer. . . . I after supper walked in the dark down to Tower Street, and there saw it all on fire, at the Trinity House on that side, which was very near us; and the fire with extraordinary vehemence. *Now begins the practice of blowing up of Houses in Tower Street, those next the Tower, which at first did frighten people more than anything; but it stopped the fire where it was done, it bringing down the houses to the ground in the same places they stood, and then it was easy to quench what little fire was in it, though it kindled nothing almost.* . . . I wrote to my father this night; but the Post being burned, the letter could not go.

Fourth Day.—We shall give Pepys precedence in the narration of the events of to-day:

5th. I lay down in the office again upon W. Hewer's quilt, being mighty weary, and sore in my feet with going till I was hardly able to stand. About 2 in the morning my wife calls me up, and tells me of new cries of fire, it being come to Barking Church, which is the bottom of our lane. I up; and finding it so, resolved presently to take her away, and did, and took my gold, which was about £2350. W. Hewer and Jane down by Proudy's boat to Woolwich; but Lord! what a sad sight it was by moone-light to see the whole city almost on fire, that you might see it as plain at Woolwich as if you were by it. There, when I come, I find the gates shut, but no guard kept at all; which troubled me, because of discourses now began, that there is a plot in it, and that the French had done it. I got the gates open, and to Mr. Shelden's, where I locked up my gold, and charged my wife and W. Hewer never to leave the room without one of them in it, night or day. So back again, by the way seeing my goods well in the lighters at Deptford, and watched well by people. Home, and whereas I expected to see our house on fire, it being now about 7 o'clock, it was not. But to the fire, and there find greater hopes than I expected; for my confidence of finding our office on fire was such, that I durst not ask anybody how it was with us, till I came and saw that it was not burned. But, going to the fire, I find, by the blowing up of houses, and the great help given by the workmen out of the King's Yards, sent up to Sir W. Pen, there is a good stop given to it, as well at Marke Lane end as at ours; it having only burned the dyall of Barking Church, and part of the porch, and was there quenched. I up to the top of Barking steeple, and there saw the saddest sight of desolation that I ever saw; everywhere great fires, oyle-cellars, and brimstone, and other things burning. I became afraid to stay there long, and therefore down again as fast as I could, the fire being spread as far as I could see it; and to Sir W. Pen's. . . . Here I met Mr. Young and Mr. Whistler; and having removed all my things, and received good hopes that the fire at our end is stopped, they and I walked into the town, and find Fenchurch Street, Gracious Street, and Lombard Street all in dust. The Exchange a sad sight, nothing standing there, of all the statues or pillars, but Sir Thomas Gresham's picture in the corner. In Moore-fields, our feet is ready to burn, walking through the town among the hot coles, and find that full of people, and poor wretches carrying their goods there, and everybody keeping his goods together by themselves; and a great blessing it is for them that it is fair weather for them to keep abroad night and day; drunk there and paid two pence for a plain penny loaf. Thence homeward, having passed through Cheapside and Newgate Market, all burned. . . . So home at night, and find there good hopes of saving our office; but great endeavours of watching all night, and having men ready. . . . And I lay down and slept, . . . though, when I rose, I heard there had been a great alarm of French and Dutch having risen, which

proved nothing. But it is a strange thing to see how long this time did look since Sunday, having been always full of variety of actions, and little sleep, that it looked like a week or more, and I had forgotten almost the day of the week.

Here is Evelyn's account of the same day :

5th. I crossed towards Whitehall; but oh! the confusion there was then at that Court. It pleased H. M. to command me among the rest to look after the quenching of Fetter Lane end, to preserve (if possible) that part of Holborn, whilst the rest of the gentlemen took their several posts, some at one part and some at another (for they now began to bestir themselves, and not till now, who hitherto had stood as men intoxicated, with their hands across), and began to consider that nothing was likely to put a stop but the blowing up of so many houses as might make a wider gap than any had yet been made, by the ordinary method of pulling them down with engines. *This some stout seamen proposed early enough to have saved near the whole City, but this some tenacious and avaricious men, aldermen, etc., would not permit, because their houses must have been of the first.* It was therefore now commanded to be practised, and my concern being particularly for the Hospital of St. Bartholomew, near Smithfield, where I had many wounded and sick men, made me the more diligent to promote it; nor was my care for the Savoy less. It now pleased God, by abating the wind, and by the industry of the people, when almost all was lost, infusing a new spirit into them, *that the fury of it began sensibly to abate about noon*, so as it came no farther than the Temple westward, nor than the entrance of Smithfield north: but continued all this day and night so impetuous toward Cripplegate and the Tower as made us all despair; it also broke out again in the Temple; but the courage of the multitude persisting, and many houses being blown up, such gaps and desolations were soon made, as with the former three days' consumption, the back fire did not so vehemently urge upon the rest as formerly. There was yet no standing near the luring and glowing ruins by near a furlong's space. The coal and wood wharfs and magazines of oil, rosin, etc., did infinite mischief, so as the invective, which a little before I had dedicated to H. M. and pub. [1661, *Fumifugium*, see LONDON this date], giving warning of what might prob. be the issue of suffering those shops to be in the City, was looked on as a prophecy. The poor inhabitants were dispersed about St. George's Fields and Moor Fields, as far as Highgate; and several miles in circle, some under tents, some under miserable huts and hovels, many without a rag, or any necessary utensils, bed or board, who from delicateness, riches, and easy accommodations in stately and well-furnished houses, were now reduced to extremest misery and poverty. In this calamitous condition, I returned with a sad heart to my house—blessing and adoring the distinguishing mercy of God to me and mine, who in the midst of all this ruin was like Lot, in my little Zoar, safe and sound.

Fifth Day.—We will allow Pepys to be our first guide to-day :

6th. Up about 5 o'clock, and met Mr. Gauden at the gate of the office, I intending to go out as I used every now and then, to-day, to see how the fire is, to call our men to Bishopsgate, where no fire had yet been near, and there is now one broke out: which did give great grounds to people, and me too, to think that there is some kind of plot in this, on which many by this time have been taken, and it hath been dangerous for any stranger to walk the streets; but I went with the men, and we did put it out in a little time, so that that was well again. It was pretty to see how hard the women did work in the cannells, sweeping of water; but then they would scold for drink, and be as drunk as devils. I saw good butts of sugar broke open in the street, and people give and take handfull out, and put into beer, and drink it. And now, all being pretty well, I took boat, and over to Southwarke, and took boat on the other side the bridge, and so to Westminster, thinking to shift myself, being all in dirt from top to bottom; but could not find any place to buy a shirt or a pair of gloves, Westminster Hall being full of people's goods, those in Westminster having removed all their goods, and the Exchequer money put into vessels to carry to Nonsuch [at which house the Exchequer had been kept during the Plague]; but to the Swan, and there was trimmed: and then to White Hall, but saw nobody; and so home. A sad sight to see how the river looks: no houses nor church near it, to the Temple, where it stopped. At home did go with Sir W. Batten, and our neighbour, Knightly, who, with one more, was the only man of fashion left in all the neighbourhood thereabout, they all removing their goods and leaving their houses to the mercy of the fire. . . . From them to the office, and slept there with the office full of labourers, who talked and walked and slept all night long there. But strange it is to see Clothworkers' Hall on fire these three days and nights in one body of flame, it being a cellar full of oyle.

Now we turn to Evelyn, who has very little to say:

6th. Thursday. I represented to H. M. the case of the French prisoners at war in my custody, and besought him that there might be still the same care of watching at all places contiguous to unseized houses. It is not indeed imaginable how extraordinary the vigilance and activity of the King and the Duke was, even labouring in person, and being present to command, order, reward, or encourage workmen, by which he showed his affection to his people, and gained theirs. . . .

Sixth Day.—Danger now all passed, but it is important to know something of what follows. Pepys shall again take the place as first guide :

7th. Up by 5 o'clock; and blessed be God! find all well; and by water to Paul's Wharfe. Walked thence and saw all the towne burned, and a miserable sight of Paul's Church, with all the roofs fallen, and the body of the quire fallen into St. Faith's; Paul's School, also Ludgate and Fleet Street. My Father's house and the Church, and a good part of the Temple the like. So to Creed's lodging near the New Exchange, and there find him laid down upon a bed; the house all unfurnished, there being fears of the fire coming to them. There borrowed a shirt of him, and washed. To Sir W. Coventry at St. James', who lay without curtains, having removed all his goods; as the King at White Hall and everybody had done, and was doing. He hopes we shall have no public distractions upon this fire, which is what everybody fears, because of the talk of the French having a hand in it. And it is a proper time for discontents; but all men's minds are full of care to protect themselves and save their goods: the militia are in arms everywhere. . . . And so home and find all well. . . . Strange to hear what is bid for houses all up and down here; a friend of Sir W. Rider's having £150 for what he used to let for £40 p. a. Much dispute where the Custome House shall be; thereby the growth of the City to be again foreseen. My Lord Treasurer, they say, and others, would have it at the other end of the town. . . . A proclamation is come out for markets to be kept at Leadenhall and Mile-end Greene, and several other places about Town; and Tower Hill, and all Churches to be set open to receive poor people.

We now turn to Evelyn, who has more solid news for us to-day :

7th. I went this morning on foot from Whitehall as far as Lond. Bridge, through the late Fleet Street, Ludgate Hill, by St. Paul's, Cheapside, Exchange, Bishopsgate, Aldersgate, and out to Moorfields, and thence through Cornhill, etc., with extraordinary difficulty, clambering over heaps of yet smoking rubbish, and frequently mistaking where I was: the ground under my feet so hot, that it even burnt the soles of my shoes. In the meantime H. M. had got to the Tower by water, to

demolish the houses about the Graff, which being built entirely about it, had they taken fire and attacked the White Tower, where the magazine of powder lay, would undoubtedly not only have beaten down and destroyed all the bridge, but sunk and torn the vessels in the river, and rendered the demolition beyond all expression for several miles about the country.

At my return, I was infinitely concerned to find that goodly Church St. Paul's—now a sad ruin, and that beautiful portico (for structure comparable to any in Europe, as not long before repaired by the late King) now rent in pieces, flakes of vast stone split asunder, and nothing remaining entire but the inscription in the architrave, showing by whom it was built, which had not one letter of it defaced! It was astonishing to see what immense stones the heat had in a manner calcined, so that all the ornaments, columns, friezes, capitals, and projectures of massy Portland stone, flew off even to the very roof, where a sheet of lead covering a great space . . . was totally melted; the ruins of the vaulted roof falling, broke into St. Faith's, which, being filled with the magazines of books belonging to the Stationers, and carried thither for safety, they were all consumed, burning for a week following. It is also observable that the lead over the altar at the east end was untouched, and among the divers monuments, the body of one Bishop remained entire. Thus lay in ashes that most venerable church, one of the most ancient pieces of early piety in the Christian world, besides near 200 more. The lead, iron-work, bells, plate, etc., melted; the exquisitely wrought Mercers' Chapel, the sumptuous Exchange, the august fabric of Christ Church, all the rest of the [City] Cos. Halls, splendid buildings, arches, entries, all in dust; the fountains dried up and ruined, whilst the very waters remained boiling; the voragos of subterranean cellars, wells, and dungeons, formerly work-houses, still burning in stench and dark clouds of smoke, so that in 5 or 6 miles traversing about, I did not see one load of timber unconsumed, nor many stones but what were coloured white as snow.

The people who now walked about the ruins appeared like men in some dismal desert, or rather in some great city laid waste by a cruel enemy; to which was added the stench that came from some poor creatures' bodies, beds, and other combustible goods. Sir Thomas Gresham's statue, though fallen from its niche in the Royal Exchange, remained entire, when all those of the Kings since the Conquest, were broken to pieces; also the Standard in Cornhill, and Queen Elizabeth's effigies, with some arms on Ludgate, continued with but little detriment, whilst the vast iron chains in the City streets, hinges, bars and gates of prisons, were many of them melted and reduced to cinders by the vehement heat. Nor was I yet able to pass through any of the narrower streets, but kept the widest; the ground and air, smoke and fiery vapour, continued so intense, that my hair was almost singed, and my feet unsufferably surbated. The bye lanes and narrower streets were quite filled up with rubbish, nor could any one possibly have known where he was, but by the ruins of some church, or hall, that had some remarkable tower, or pinnacle, remaining.

I then went towards Islington and Highgate, where one might have seen 200,000 people of all ranks and degrees dispersed and lying along by their heaps of what they could save from the fire, deploring their loss; and yet ready to perish for hunger and destitution, yet not asking one penny for relief, which to me appeared a stranger sight than any I had yet beheld. H.M. and Council indeed took all imaginable care for their relief, by proclamation for the country to come in, and refresh them with provisions.

In the midst of all this calamity and confusion, there was, I know not how, an alarm began that the French and Dutch, with whom we were now in hostility, were not only landed, but even entering the City. There was, in truth, some days before, great suspicion of those two nations joining; and now, that they had been the occasion of firing the town. This report did so terrify, that on a sudden there was such an uproar and tumult that they ran from their goods, and taking what weapons they could come at, they would not be stopped from falling on some of those nations whom they casually met, without sense or reason. The clamour and peril grew so excessive, that it made the whole court amazed, and they did with infinite pains and great difficulty, reduce and appease the people, sending troops of soldiers and guards to cause them to retire into the fields again, where they were watched all this night. I left them pretty quiet, and came home sufficiently weary and broken. Their spirits thus a little calmed, and the fright abated, they now began to repair into the suburbs about the City, where such as had friends, or opportunity, got shelter for the present; to which H.M.'s Proclamation also invited them.

The Proclamation here, and previously, referred to, was the following:

Charles R.—H. M., in his princely compassion, and very tender care, taking into consideration the distressed condition of many of his good subjects, whom the late dreadful and dismal fire hath made destitute of habitation, and exposed to many exigencies and necessities; for present remedy and redress whereof, H.M., intending to give further testimony and evidence of his grace and favour towards them, as occasion shall arise, hath thought fit to declare and pub. his Royal pleasure: That, as great proportions of bread, and all other provisions as can possibly be furnished shall be daily and constantly brought, not only to the markets formerly in use, but also to such markets as by H. M.'s late order and declaration to the Lord Mayor and Sheriffs of Lond. and Middlesex, have been appointed and ordained, viz. Clerkenwell, Islington, Finsbury-fields, Mile-end Green, and Ratcliff; H. M. being sensible that this will be for the benefit also of the towns and places adjoining, as being the best expedient to prevent the resort of such persons thereunto as may pilfer and disturb them. And whereas, also, divers of the distressed persons have saved and preserved their goods, which nevertheless they know not how to dispose of, it is H. M.'s pleasure that all churches, chapels, schools, and other like public places shall be free and open to receive the said goods, when they shall be brought to be there laid. And all the J. P.s within the several counties of Middlesex, Essex, and Surrey are to see the same to be done accordingly. And likewise that all cities and towns whatsoever shall, without any contradiction, receive the said distressed persons, and permit them to the free exercise of their manual trades; H. M. resolving and promising that when the present exigence shall be passed over, he will take such care and order, that the said persons shall be no burthen to their towns or parishes. And it is H. M.'s pleasure that this his declaration be forthwith pub., not only by the Sheriffs of Lond. and Middlesex, but also by all other Sheriffs, Mayors, and other chief officers in their respective precincts and limits, and by the constables in every parish. And of this H. M.'s pleasure all persons concerned are to take notice, and thereunto to give due obedience to the utmost of their power, as they will answer the contrary at their peril. Given at our Court at Whitehall, the 5th day of Sept. in the 18th year of our reign, 1666. God save the King!

But we have not quite finished with our good guides, Pepys and Evelyn. They each have a few more facts of interest to impart. Pepys, under date 8 Sept., says: "I met with many people undone, and more that have extraordinary great losses. *People speaking their thoughts variously about the beginning of the fire*, and the rebuilding of the City." On the 9th he tells us it was raining, which was "good for the fyre." On the 10th: "All the morning clearing our cellars, and breaking in pieces all my old lumber, to make room, and to prevent fire." On the 15th: "Capt. Cocke says he hath computed that all the rents of the houses lost this fire in the City comes to £600,000 p.a.; and this

will make the Parl. more quiet than otherwise they would have been, and give the King a more ready supply; *that the supply must be by excise as it is in Holland*; that the Parl. will see the necessity to carry on the war," etc., some of which propositions do not seem so clear to us who review them more than two centuries after the fire. But the estimate of the £600,000 p.a. rental, at 20 years' purchase all round, amounts to £12,000,000, as an estimate of the damage! On the 17th: "By water seeing the City all the way—a sad sight indeed, much fire being still in."

Turning to Evelyn, under date 10th: "I went again to the ruins; for it was now no longer a city." 13th: "I presented H.M. with a survey of the ruins, and a plot for a new city, with a discourse upon it; whereupon, after dinner, H.M. sent for me into the Queen's bed-chamber, Her Majesty and the Duke only being present; they examined each particular, and discoursed on them for near an hour, seeming to be extremely pleased with what I had so early thought on." On the 21st: "This season, after so long and extraordinary a drought in Augt. and Sept., as if preparatory for the dreadful fire, was so very wet and rainy, as many feared an ensuing famine."

The fire extinguished; the first flashes of revenge on the French and the Dutch exhausted; its true cause had yet to be considered. The notion of some impending injury to the City from the Papists was not new: for as early as 1642 there had appeared: *The Butcher's Blessing, or the Bloody Intentions of Romish Cavaliers against the City of Lond.* The citizens being reminded of this, and smarting under their losses, were only too ready now to believe that some secret malice of this kind had contributed to their undoing. Such an idea, once started, soon developed into large proportions, and inquiry therefore became absolutely necessary.

It is further stated in a letter written in 1666, and printed in Macolm's *Londinium* (vol. iv. p. 80), "Most of our last year's Almanacks talked of fire in London, and one named the month, but it was expunged by l'Estrange (who licensed them) for fear of consequences." Mother Shipton too had prophesied, "That London in Sixty-six should be in ashes." It is said that a son of the famous Sir Kenelm Digby, and others, had predicted the same thing. Such so-called prophecies, indeed, always start up after great events.—See *Gent. Mag.* 1831, pt. 2, p. 6.

Southey, in his "Life of Bunyan," prefixed to the ed. of *Pilgrim's Progress* edited by him in 1830, gives the following remarkable passage:

Even among the sober sects there were men, who, at the cost of a rebellion, would gladly again have thrown down the Church estab., for the hope of setting up their own system during the anarchy that must ensue. Among the wilder, some were anxious to proclaim King Jesus, and take possession of the earth, as being the saints to whom it was promised; and some, a few years later, less in hopes of effecting their republican projects, than in despair and vengeance, *conspired to burn London*; they were discovered, tried, convicted, and executed. They confessed their intentions; they named the day which had been appointed for carrying it into effect, because an astrological scheme had shown it to be a lucky one for their design [here the almanack-makers seem justified]; and on that very day the fire of London broke out, etc.

We assume that so careful and well-informed a writer as Southey had good grounds for all he stated; but if so, it is clear that political enthusiasts rather than Papists are to be suspected.

On the 18th Sept. Parl. met; and upon the 25th the House of Commons appointed a Committee to inquire into the causes of the late fire. On the 22nd Jan. the Committee made its Report, but Parl. was prorogued before any decision was come to concerning the same, which will not be wondered at when the nature of the Rep. is seen. It is one of the most remarkable State documents ever produced. The Committee orig. consisted of 45 members. Other names were added on two occasions, so that in the whole it must have consisted of about 70 Members of the House. It is first set forth that "the Hon. Committee, according to the fore-mentioned Orders of the House, did meet in the Speaker's Chamber, and having chosen Sir Robert Brook for their Chairman, proceeded to receive many considerable informations from divers credible persons, about the matter wherewith they were intrusted, and thereupon did at last agree that Sir Robert Brook should make the ensuing Report to the Hon. House of Commons." Here it is:

The Rep. of Sir Robert Brook, Chairman to the Committee that was appointed by the House of Commons to inquire into the Firing of the City of London, made the two and twentieth of January, 1666.

In a letter from Alanson, of the 23rd of Aug. 1666, new style, written from one Dural to a gentleman lodging in the house of one of the ministers of the French Church in London, called Monsieur Hernault, there were these expressions:—"Pray acquaint me with the truth of certain news which is common in this country, That a fire from heaven is fallen upon a city called Belke, situate on the side of the river of Thames, where a world of people have been killed and burnt, and houses also consumed: which seemed a word of Cabal cast out by some that were knowing, and others that might be ignorant of the signification of it."

Mrs. Elizabeth Styles informs, That in April last, in an eager discourse she had with a French servant of Sir Vere Fan, he hastily replied, *You English maids will like the French men better, when there is not a house left between Temple Bar and London Bridge.* To which she answered, I hope your eyes will never see that. He replied, *This will come to pass between June and October.*

William Tisdale informs, That he being about the beginning of July at the Greyhound in St. Martins with one Fitts-harris, an Irish Papist, heard him say, There would be a sad desolation in September, in November a worse, in December all would be united into one. Whereupon he asked him, Where this desolation would be? He answered, *In London.*

Mr. Light, of Ratcliff, having some discourse with Mr. Langhorne, of the Middle Temple, Barrister

(reputed a zealous Papist), about *Febry*, . . . 65 last, after some discourse in disputation about religion, he took him by the hand, and said to him, *You expect great things in sixty-six, and think that Rome will be destroyed, but what if it be London?*

Mr. Kitley, of Barkin in Essex, informs, That one Mrs. Yasley, a Papist, of Ilford in the said County, came unto his house, August the 13th, and being in discourse with his mother, said, *They say the next Thursday will be the hottest day that ever was in England.* She replied, *I hope the hottest season of the year is now past.* To which she answered, *I know not whether it be the hottest for weather or for action.* This Mrs. Yasley coming to the same house the week after the fire, Mr. Kitley said to her with some trouble, *I have often thought of your hot Thursday.* To which she replied, *It was not indeed upon the Thursday, but it happened upon the Sunday was sennight after.* Mrs. Yasley hearing this evidence produced against her, endeavoured to avoid the words, saying, That upon the 13th of August she did tell Mrs. Kitley, That they say the next Thursday will be the darkest Thursday that ever was in England, but not otherwise; which she affirms to have received from one Finchman, an old woman of Ilford; who being examined by a Justice of the Peace, to discover the truth thereof, denied that she ever said any such words to Mrs. Yasley, or that she had discoursed with her about any such matter. And as to the subsequent words, she saith Mrs. Yasley denies ever to have spoken them. But Mr. Kitley offered in her presence (if it should be demanded) to bring his mother and wife to testify the same.

William Ducket, Esquire, a Member of the House, informs, That one Henry Baker of Chippenham in the County of Wilts, coming from market with one John Woodman of Kelleway in the same County, the Thursday before the fire began in London, they had some discourse about the buying of a yoke of fat bullocks, wherein they differed, because Woodman, who was to sell them, was desired to keep them a while in his hands; but the said Woodman denied so to do, for that, as he alleged, he could not stay in the country till that time which Baker would have them delivered to him in, and being asked whether he was going, he refused to tell, asking what he had to do to make that question. But riding a little further, the said Woodman exprest these words, *You are brave blades at Chippenham; you made bonfires lately for beating the Dutch.* But since you delight in bonfires, you shall have your bellies full of them ere it be long, adding, *That if he lived one week longer, he should see London as sad a London as ever it was, since the world began.* And in some short time after, he should see as bloody a time as ever was since England was England. This discourse was not much taken notice of at that time it was spoken. But when the City of London was burnt, the said Henry Baker gave this information to the said Mr. Ducket, and thereupon he issued out his warrant to apprehend Woodman, but he was gone out of the country, and cannot be heard of since.

Robert Hubert, of Roan, in Normandy, who acknowledged that he was one of those that fired the house of Mr. Farryner, a baker, in Pudding Lane, from whence the fire had its beginning, confessed that he came out of France with one Stephen Peidloc about four months before the fire, and went into Sweden with him, where he also staid with him as his companion four months, and then they came together into England in a Swedish ship called the *Shipper*, where he staid on board with the said Peidloc till that Saturday night, in which the fire brake out. When Peidloc, taking him out of the ship, carried him to Pudding Lane, and he being earnest to know whether he would carry him, he would not satisfy him till he had brought him to the place; and then he told him, that he had brought three balls, and gave him one of them to throw into the house; and he would have been further satisfied in the design, as he said, before he would execute it. But Peidloc was so impatient that he would not hear him, and then he did the fact, which was, that he put a fire-ball at the end of a long pole, and lighting it with a piece of match, he put it in at a window, and staid till he saw the house in a flame. He confessed that there were three and twenty complices, whereof Peidloc was the chief.

Mr. Graves, a French merchant, living in St. Mary Axe, informed this Committee that he had known Hubert ever since he was four years old, and had ever observed him to be a person of a mischievous inclination, and therefore fit for any villanous enterprize; and because of his knowledge he had of him he went to visit him in prison, where when he saw him, he could not but commiserate the condition whereinto he had brought himself. And for his better discovery of the fact, he told him, the said Hubert, that he did not believe he had done that of which he confessed himself guilty. To which Hubert replied, *Yes, Sir, I am guilty of it, and have been brought to it by the instigation of Monsieur Peidloc; but not out of any malice to the English nation, but from a desire of reward, which he promised me upon my return into France.*

It is observable that this miserable creature, who confessed himself to the Committee to be a Protestant, was a Papist, and dyed so. And as for the aforesaid Peidloc, the said Mr. Graves informed, that he had had a full knowledge of him, and knew him to be a very debaish person, and apt to any wicked design. Moreover, for a clear conviction of the guilt of the aforesaid Hubert, Mr. Louman, the keeper of the White Lion Prison, was appointed to see him upon a horse, and to go with him, and to see if he could find out the place where he threw the fire-ball. Upon which, Hubert, with more readiness than those that were well acquainted with the place, went to Pudding Lane, unto the very place where the house that was first fired stood, saying, *Here stood the house.* The jaylor endeavouring to draw him from that belief, and put him upon seeking for some other place, but he positively persisted in what he had first said; and affirmed that to have been the said house. It being intimated to Committee, that notwithstanding the confession of the said Hubert, it was confidently reported, that the fire in the fore-mentioned Farryner's house began by accident. The Committee therefore sent for him the said Farryner before them, who being examined, said, That it was impossible any fire should happen in his house by accident; for he had, after twelve of the clock that night, gone through every room thereof, and found no fire but in one chimney, where the room was paved with bricks, which fire he diligently raked up in embers. He was then asked whether no window or door might let in wind to disturb those coals? He affirmed there was no possibility for any wind to disturb them, and that was absolutely set on fire on purpose.

Dawes Weymansel, Esq., one of His Majestie's Justices of the Peace, informed, That he saw a man apprehended in the time of the fire near the Temple, with his pockets stuff with combustible matter made of flax, tow, and such like materials.

Doctor John Packer informs, That he saw a person in the time of the fire throw some combustible matter into a shop in the Old Bailey, which he thinks was the shop of an apothecary; and that immediately thereupon he saw a great smook and smelt a smell of brimstone. The person that did this immediately ran away, but upon the out-cry of the people he was taken by the guards.

Mr. Randal, Mr. Haslem and Mr. Humphry Bowyer, do all agree, That they saw a person flinging something in a house near St. Antholin's Church; and that thereupon the house was on fire, and the smook thereof infested the adjacent houses. And when this was done, there was no fire near that place.

Mr. Michael March, an officer in the Trained Bands in a Company of Sir Richard Brown's, apprehended a Walloon in the time of the fire at the Nag's Head in Leaden-hall Street, with an instrument like a dark lantern, made (as is conceived) to lay a train of powder, and it was filled with gunpowder. There were two more of the same nation in his company. They being asked to what use they employed the same instrument, would give no account thereof.

Newton Killingworth, Esq., informed, That he apprehended a person during the fire about whom

he found much *combustible matter*, and certain *black things of a long figure*, which he could not endure to hold in his hands by reason of their extreme heat. This person was so surprised at first, that he could not answer to any questions; but being on his way to White-hall, he acted the part of a mad-man, and so continued while he was with him.

Sir John Maynard, a Member of the House, affirms, That he had some of that combustible matter in his hands, and though it were in its natural substance and unfired, yet the heat of it was scarcely to be endured by the touch.

Mr. Greeman, of Southwark, Brewer (whose house was lately fired), informs, That on the day his house was fired (about a quarter of an hour before that happened) a paper with a ball of wildfire, containing near a pound weight wrapped in it, was found in the *nave of a wheel*, in a wheeler's yard, where lay a great quantity of timber. How his house was fired, he knoweth not; but this he affirmed to the Committee, That it could not be by accident, because there had not been any candle or fire in the house where the hay lay, that whole day; and that the hay being laid in very dry, and before Midsommer, could not possibly be set on fire within itself. Moreover he said, That the hay-loft was on fire on the top of the house, and that the fire spread from one end of the roof to another in an instant.

Mr. Richard Harwood informs, That being near the Feathers Tavern by *St. Paul's*, upon the fourth of September, he saw something through a grate in a cellar like wildfire, by the sparkling and spitting of it he could judge to be no other; whereupon he gave notice of it to some souldiers that were near the place, who caused it to be quenched.

I had order from the Committee to acquaint you, That we traced several persons apprehended upon strong suspicion (during the fire) to the guards, but could not make further discovery of them.

"Thus far was the Report: what follows was given in to the Committee, but not by them Reported to the House at that time." A good deal of "what follows" is very remarkable, but cannot be reproduced here. No action was taken by Parl.

The question of doubt and uncertainty as to the cause of the fire did not end with the Parl. inquiry, but continued for many years; nor was it confined to the uneducated classes, as the following will show:

At the Committee of Trade and Plantations, in the Council Chamber at White-hall, Thursday the 15th of Dec. 1681: present His Highness Prince Rupert, Lord Privy Seal, Earl of Craven, &c.

"The Petition of Col^l William Doughty, referr'd by an Order of Council of the 18th of Nov. last, is read, wherein, &c.

"Col. Doughty does further acquaint the Committee, that about two months before the fire of London, my L^d. Taff's Brother, a Capuchin, Col^l. Mort Obryan, and sev^l others in France, did speak of a great disaster that should happen shortly after in England, and that soon after this discourse he saw at Paris this Capuchin, my L^d. Taff's Brother, in gentleman's cloathes and equipage. And as for the particular discourse, he refers himself to a letter written by him, the said Col^l. Douglass (*sic*) at that time to Col. Nicholas Carew here in London. Col^l. Doughty does likewise make oath to the truth of what is above mentioned according to the best of his remembrance; wth their Ldps. agree to report unto his Maty. in Council to-morrow afternoon, and Dr. (*sic*) Nich^s. Carew is appointed to give his attendance at that time." We do not follow out the result.

We are glad to turn from these "dark suspicions" to another and more rational mode of thought. We find in Stow's *Survey of London* a chap. headed: "Of the strange concurrence of several causes (happening at the same time) occasioning the fire so vigorously to spread and increase;" and which we slightly condense. Besides the supine negligence of the people (whether master or servants) of the house where this dreadful conflagration began; next unto God's just judgments for the heinous crying sins of this nation and city in particular; *some have made enquiry into other natural causes, which might occasion such a general ruin from so small a beginning.* And 1. They consider the time of night when it first began, viz. between one and two of the clock after midnight, when all were in a dead sleep. 2. It was *Saturday* night, when many of the most eminent—citizens, merchants, and others—were retired into the country, and none but servants left to look to their city houses. 3. It was in the long vacation, when many citizens and tradesmen were away at country fairs, and getting in debts. 4. The closeness of the buildings and narrowness of the streets in places, did much facilitate it by hindering the engines. 5. The matter which the houses all thereabouts were; viz. timber and those very old. 6. The dryness of the preceding season; there having been a great drought even to that very day, which had so dried the timber that it was never more apt to take fire. 7. The nature of the wares and commodities stored: as oyl, pitch, tar, cordage, hemp, flax, rosin, etc. 8. An easterly wind (which is the dryest of all others) had blown for several days together before; and at that time very strongly. 9. The unexpected failing of the water thereabouts at that time; for the engine at the north end of London Bridge, called the *Thames Water Tower* (which supplied all that part of the city with Thames water), was out of order, and in a few hours was itself burnt down, so that the water-pipes which conveyed the water from thence through the streets were soon empty. *Lastly.* An unusual negligence at first and a confidence of easy quenching it, and of its stopping at several probable places afterwards: turned at length into a confusion, consternation, and despair, people chusing rather by flight to save their goods, than by a vigorous opposition to save their own houses, and the whole city.

To all which reasons, however, adds Stow, "must not be passed over the general suspicion that most then had, of incendiaries, laying combustible stuff in many places, having observed divers distant houses to be on fire together. And many were take upon suspicion."

Clarendon says :

Certain it is that upon the strictest examination that could be afterwards made by the King's command, and then by the diligence of the House, that, upon the general jealousy and rumour, made a Committee, that was very diligent and solicitous to make that discovery, that there was never any probable evidence . . . that there was any other cause of that woeful fire than the displeasure of God Almighty; the first accident of the beginning in a baker's house, where there was so great a stock of faggots, and the neighbourhood of much combustible matter, of pitch and rosin, and the like, led it in an instant from house to house through Thames Street, with the agitation of so terrible a wind to scatter and disperse it.

Most of the later writers on the subject regard the fire, whether purely accidental in its origin or not, as having spread from circumstances beyond human control at that time. In this view we concur.

Malcolm, in his *Anecdotes of London*, etc. (1811), says, regarding the Fire :

This subject may be allowed to be familiar to me, and I have, perhaps, had more than common means of judging: and I now declare it to be my full and decided opinion that London was burned by the Gov. to annihilate the plague, which was grafted in every crevice of the hateful old houses composing it.

Previous writers had expressed a like view. Dryden, who (*Annus Mirabilis*) calls the fire "this chymic flame" (having reference to its effects), did not believe in its being intentionally caused :

— "from what source unknown
Those seeds of fire their fatal birth disclose."

In a pamph. pub. 1667, of which the full title is : *Observations both Historical and Moral on the Burning of London, September, 1666; with an Account of the Losses, and a most remarkable Parallel between London and Moscow, both as to the Plague and Fire. Also an Essay touching the Easterly Wind. Written for Way of Narrative, for Satisfaction of the Present and Future Ages.* By Rege Sencera. London : Printed by Thomas Ratcliffe, and are to be sold by Robert Pawlet, at the Bible in Chancery Lane, 1667. Quart. Containing 38 pp. There is embodied the following detailed estimate of the losses occasioned by the fire; introduced with a solemn preface, thus :

Although the loss of so famous a city, and the riches contained within its precinct, be inestimable, nevertheless to satisfy the curiosity of the reader, and that of posterity, as also to give some light unto those, who, with a more mature deliberation, shall attempt the full history of it; we will set down the chiefest heads by which it is valued, leaving the liberty to the judicious reader, to add to, or subtract from, as he shall think fit: for we do not pretend here to give an exact account of all the losses, which, we hope that some better wits, and that are more at leisure, will undertake hereafter: but only to invite them, by this, to a more curious and earnest inquiry of the truth, and so transmit to posterity a fearful example of God's judgement, that they may in avoiding sin, also avoid the like, to the glory and praise of his most holy name.

He proceeds: Let it therefore be said again, that, by the computations of the best geometricians, the City of Lond. within the walls was seated upon about 460 acres of ground, wherein were built about 15,000 houses, besides churches, chapels, schools, halls, and public buildings; out of this quantity of houses, 12,000 are thought to be burned, which is 4 parts out of 5, each house being valued one with another at £25 a year, which at 12 years purchase, maketh £300; the whole amounting to £3,600,000.

Four score and 7 parochial churches, besides that of St. Paul's, the Cathedral, and 6 consecrated chapels, the Exchange, Guildhall, Custom-House, the Halls of Companies, and other public buildings, amounting to half as much, i.e. £1,800,000.

The goods that every private man lost, one with another, valued at half the value of the houses, i.e. £1,800,000.

About 20 wharfs of coal and wood, valued at £1000 a piece, i.e. £20,000.

About 100,000 boats and barges, 1000 cart loads, with porters to remove the goods to and fro, as well for the houses that were a burning as those that stood in fear of it, at 20s. a load, i.e. £150,000.

In all £7,335,000.

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The Regulations which were enforced regarding the rebuilding of the City have already been reviewed under FIRE PROTECTION. They will be reviewed again, in some other aspects, under LONDON. Of this we may feel quite assured, that whatever may have been the inconvenience or even ruin which immediately resulted from the fire, the City received in the end a lasting benefit. For centuries previously the City had been a continued lurking-place for the *Plague*. Its narrow streets and alleys, its dark and unwholesome dwellings, its deficient water supply and drainage, together with its increasing crowds of inhabitants, had rendered it one of the plague-spots of Europe. During the preceding year no fewer than 160,000 persons had fallen victims to this giant pestilence. [PLAGUE.] The City passed through its purification of fire, and has since remained free. It has been asserted, and not without some show of truth, that but for the Fire, Lond. would hardly have been suited to be the commercial capital of Eng.

The more immediate results of the fire were: (1) the actual adoption of *Fire Ins.* in England, commencing in the metropolis the very next year. [FIRE INS., HIST. OF]; and (2) its more general diffusion throughout Europe. The Municipal Fire Casse of *Hamburg* was set on foot in 1667; and the lesson of London's Great Fire induced measures of fire protection in every principal city and town in Europe.

The following inscription was placed, by authority, upon the house in Pudding Lane in which the fire commenced :

"Here, by Ye permission of Heaven, Hell brake loose upon this Protestant City, from the malicious Hearts of barbarous Papists, by Ye hand of their agent, HUBERT. Who confessed, and on Ye Ruines of this Place declared his Fact; for which he was hanged: viz. That here began that dreadful Fire, which is described and perpetuated on and by the Neighboring Pillar [the Monument] erected anno 1687 in the mayoralty of Sir Patience Wood, Knt." [House pulled down, and tablet discovered, August, 1876.]

The Monument on Fish Street Hill, erected in commemoration of the Great Fire, 202ft. in height, was commenced by Sir Christopher Wren in 1671, and completed in 1677, at an expense of £13,700. It had been the intention of Sir Christopher Wren to surmount the monument with a statue of Charles II., and when he laid his original design before the King, the Column was thus ornamented. Charles, however, declined the honour. "Not," says Wren, "that H. M. disliked a statue, but he was pleased to think a large ball of metal gilt would be more agreeable. Accordingly, the present gilded vase of flames was substituted for the proposed statue." [MONUMENT.]

The following is as complete an account of the literature relating to this fire as we are able to prepare. We are indebted to the Catalogue of the Library of the Corporation of London at the Guildhall, where many of these curious publications may be seen :

- Letter of King Charles II. to the Lord Mayor, etc. of Lond. concerning relieving the public distress caused by the late Fire of Lond.* 1666.
- Order of the Lord Mayor [Weld] for rebuilding the City after the Fire.* [?1666.]
- Lex Ignea; a Sermon preached before the King, October 10, 1666, at the Solemn Fast for the late Fire of Lond.* By William Sandcroft, D.D., Dean of St. Paul's. 4to. 1666.
- Declaration of His Majesty to his City of London upon occasion of the late calamity by the lamentable fire.* Folio. Lond. 1666.
- Lamentation, mourning and woe, sighed forth, in a Sermon preached at St. Martin's in the Fields, on September 9, 1666, after the Fire of London.* By Nathaniel Hardy, D.D., Vicar. 4to. 1666.
- London's destroyer detected, and destruction lamented; or some serious ruminations and profitable reflections upon the late dreadful, dismal, and never-to-be-forgotten conflagration: wherein is briefly comprehended several things, considerable, in order to London's present recovery and future prosperity.* 4to. Lond. 1666.
- The countries sense of Londons sufferings in the late most lamentable fire; discovered in the opening and improving the lamentations of Jeremy; and in the resolving of three questions, not only suitable to that sad dispensation, but considerable also in all grievous afflictions.* By W. T., a well-wisher to the City, and to those that suffer with it. 8vo. London, 1667.
- England's Warning; or England's Sorrow for London's Misery.* 12mo. 1667. Being a description of the great fire, and a list of the parishes burnt. By an Eye-witness.
- A Short Narrative of the Late Dreadful Fire in London.* By Edward Waterhous. 8vo. 1667.
- Pyrotechnica Leyolana; Ignatian Fire Works; or the fiery Jesuit's temper and behaviour exposed to public view for the sake of London.* 4to. 1667.
- Upon the lamentable Fire in London. A Poem.* By J.A. of Kings Colledge in Cambridge Fellow. 4to. 1667.
- A True and Faithful Account of the several Informations exhibited to the Honble. Committee appointed by the Parliament to enquire into the late dreadful burning of the City of London, together with other informations touching the insolency of Popish Priests and Jesuites, and the increase of Popery, brought to the Honble. Committee appointed by the Parliament for that purpose.* Printed in the year 1667. 4to. [This contains the Rep. of the Parl. Committee already quoted.]
- The Burning of London in the year 1666 commemorated and improved in CX. Discourses.* By Samuel Rolle. 1667.
- Observations both historical and moral upon the burning of London, 1666, etc.* By Rege Sencera. 1667. [This we have already quoted under its full title.]
- Seasonable Thoughts in Sad Times: being some reflections on the Warre, the Pestilence, and the Burning of Lond. considered in the Calamity, Cause and Cure.* In verse. By John Tabor. 1667.
- London's Flames discovered by informations taken before the Committee appointed to enquire after the burning of the City of London, and after the insolency of the Papists, etc* 4to. London, 1667.
- The Widow of Sarepta: a Sermon on occasion of the Fire of London.* By David Stokes, D.D. 4to. 1667.
- God's Terrible Voice in the City by Plague and Fire.* By Rev. Thomas Vincent. 1667. [This passed through 13 eds. before 1671.] By the same, *God's Terrible Advice to the City by Plague and Famine.*
- Annus Mirabilis, the Year of Wonders 1666: an historical poem: describing the Fire of London.* By John Dryden, Esq. 1667.

- A short and serious Narrative of London's Fatal Fire, with its diurnal and nocturnal progression; a poem: as also London's Lamentation to her regardless passengers.* 4to. 1667.
- Confirmation by the Privy Council of the Lord Mayor's order for rebuilding the City after the Great Fire.* 1667.
- Conflagratio Londinensis Poetice Depicta: The conflagration of London poetically described, etc., both in Latin and English.* (By Dr. Ford.) 4to. 1667.
- Londini quod Reliquam; or, London's remains in Latin and English. A Poem.* (By Dr. Ford.) 4to., 2nd edition. 1667.
- Actio in Londini Incendiariorum, a Latin poem.* (By Dr. Ford.) 4to. 1667.
- The Conflagration of London poetically delineated and directed to the most noble and deserving Citizen Sir C. L., Knight and Baronet.* 4to. London. 1667.
- Londini Renascentis Imago Poetica.* (By Dr. Ford.) 4to. 1668.
- London's Resurrection, or the rebuilding of London encouraged, directed and improved.* By Samuel Rolle, Minister of the Gospel. 8vo. 1668.
- London's Resurrection poetically represented.* (By Dr. Ford.) 4to. 1668.
- An Act of Common Council for preventing and suppressing of Fires within the City of London, and Liberties thereof.* 4to. 1668. [FIRE PROTECTION.]
- London's Resurrection poetically represented.* (By Dr. Ford.) 1669.
- Trap ad Crucem, or the Papist's Watchword: an account of some late informations taken before several Justices of the Peace in and about London; also a relation of the several Fires that have happened in the said city.* 1670.
- Iter Boreale: upon the rebuilding of the City, the right honourable the Lord Mayor, and the noble Company of Batchelors dining with him May 5, 1669 (and other poems, mostly relating to London).* By R. Wild, D.D. 12mo. 1670.
- The Burning of London in the year 1666 commemorated and improved in CX. discourses.* By Samuel Rolle. 8vo. 1670.
- London's Lamentations, or a serious discourse concerning the late fiery dispensation.* By Thomas Brooks. 4to. 1670.
- Fire and Brimstone, etc.* By Rev. Thomas Vincent. 1670.
- London's Flames; being an exact and impartial account of divers informations given in to the Committee of Parliament, by divers members of Parliament, and many other persons of quality (whose names are inserted in this book), concerning the dreadful fire of London in the year 1666, and the many other strange fires which have happened since. Together with what was said by Mr. Langhorn, now a prisoner, and condemned for the horrid Popish Plot, concerning the Great Fire; wherein is plainly proved that the Popists were the contrivers and actors in the burning of that great and noble city.* 4to. 1679.
- Troia Rediviva, or the Glories of Lond. Surveyed.* In an Heroick Poem.
- The Papists' Plot, or Firing Discovered, in a perfect account of the late Fire in London.* 1679.
- A Sermon preached before the Lord Mayor and Aldermen at Guildhall Chapel, on the day of their humiliation in memory of the late dreadful fire.* By Henry Hesketh. 1679.
- A compendious history of the most remarkable passages for the last fourteen years, with an account of the plot both before and after the Fire of London.* 1680.
- A Sermon preached before the Lord Mayor and Aldermen of the City of London, at Bow Church, Sept. 2, 1680, being the anniversary fast for the burning of London.* By Gilbert Burnet. 4to. 1680.
- The Address of above 20,000 Apprentices of Lond. to the Lord Mayor, 2nd Sept. 1681, the day appointed to be observed in commemoration of the burning of that City by Papists, Jesuits, etc. anno 1666: with some of the reasons that induced the addressers to this application.* Folio sheet. 1681.
- A Sermon preached before the Lord Mayor, &c., at Bow Church, September 3, 1683, on the day of humiliation for the late dreadful Fire.* By Wm. Hopkins, B.D. 4to. 1683.
- A Sermon preached before the Lord Mayor, &c., September 2, 1685, being the anniversary fast for the dreadful Fire.* By Benjamin Calamy, D.D. 4to. 1685.
- A Sermon preached before the Lord Mayor, &c., at the Church of St. Mary le Bow, September 2, 1686, being the anniversary fast for the dreadful Fire in the year 1666.* By John Scot, B.D. 4to. 1686.
- London's Flames Reviv'd, or an Account of the several informations exhibited to a Committee appointed by Parliament to enquire into the burning of London.* 4to. 1689.
- London's Flames set in a true light, being a true and faithful account of the several informations exhibited to Parliament on the late burning of London.* 8vo. 1712.
- A Protestant Memorial erected to the immortal glory of the Whigs and Dutch: it being a full and satisfactory relation of the late mysterious plot and firing of London.* 4to. 1713.
- The burning of London by the Papists: Sed Furor Papisticus, &c.* 8vo. 1714.
- An account of the burning of the City of London, published by special authority in 1666.* 3rd edition. 8vo. 1721.

- 1666 *A Sermon preached at Guildhall Chapel, 2 Sept. 1740.* By Samuel Salter, M.A. On the Anniversary of the Fire of Lond. 4to. 1740.
A Sermon preached at St. Paul's Cathedral, September 2, 1748. By William Parker, M.A. 8vo. 1748.
A Sermon before the Rt. Honble. the Lord Mayor, &c., Sept. 3, 1750 [the public fast in remembrance of the Fire of London]. By William Meades, Rector of Knapton, Co. Cambridge. 1750.
The City Remembrancer of the Great Plague 1665; the Great Fire 1666; and the Great Storm 1703. 2 vols. 1767.
An Historical Narrative of the great and terrible Fire of London Sept. 2, 1666; with some parallel cases; also an Historical Narrative of the great and tremendous storm 20 Nov. 1703. 2 vols. 1769.
The City Remembrancer, being historical narratives of the Gt. Plague at Lond. 1665; the Great Fire 1666; and the Gt. Storm in 1703, with historic accounts of the most remarkable Plagues, Fires, and Hurricans. 2 vols. 1769.
The Annual Commemoration Sermon on the Fire of Lond., preached by the Rev. East Apthorp, (then or afterwards) D.D. 1780.
 "Prayers for the Fire of London" were introduced in the Prayer Book prefixed to the Bibles "printed at the Theater, Oxford: and are to be sold by Peter Parker, at the Leg and Star in Cornhill, London, MDCLXXXII." But we do not know when these were introduced, or when discontinued.
 As late as 1776 steps were taken in commemoration of the Great Fire. A Mr. David Hartley, M.P., a descendant of a namesake, who had (as far back as 1722) secured a patent for the construction of fireproof buildings, attempted to revive the interest in the invention by a series of experiments, which we have set forth in some detail under FIREPROOF BUILDINGS. A pillar was erected on Putney Common, which contains the following inscription: "The Right Hon. John Sawbridge, Esq., Lord Mayor of London, laid the foundation-stone of this pillar 110 years after the Fire of London, on the anniversary of that dreadful event; in memory of an invention for securing buildings against fire." Shortly afterwards the Freedom of the City of London was presented to Mr. Hartley, and the Corp. recommended the use of the invention in houses, etc., already built, or which might afterwards be built on the extensive estates belonging to the City. All this was prob. but an ingenious mode of advertising an invention which certainly had some merit, but which has now died out of remembrance.
- 1667 *Archangel* (Russia). May 26. The great warehouses of the English, Dutch and Russian merchants burned, with numerous houses; also the Custom House, Town Hall, and vast amounts of merchandize, including 25,000 tons of hemp.
- 1671 *Oxford.* May 25. A great fire in the city.
- 1672 *London.* Jan. A theatre with nearly 60 houses burned. No details.
- 1675 *Northampton.* Sept. 20. "In the afternoon a dreadful fire began at Northampton, and in a few hours burnt down most part of the town, the market place (which was a very goodly one), the stately church of Allhallows, 2 other parish churches, and above three-fourth parts of the whole town was consumed and laid in ashes. The loss was computed at £200,000."—*Bedloe's Narrative*. Other authorities state the number of houses burned at 700; the loss £250,000. Briefs were issued. (1010.)
- 1676 *Southwark* (London). May 26. Some 500 or 600 houses burned. The fire broke out at an oilman's between the George and the Tabard Inns, in the Borough, opposite St. Margaret's Hill. The front of the Tabard was consumed, but was immediately rebuilt, presumably in facsimile of the original, with its court-yard, galleries, Pilgrims' Hall, and quaint old sleeping-rooms. It is doubtful how far any part of the hotel now burnt may have been the inn described by Chaucer, where, met on the eve of a pilgrimage, the pretty Prioress, the Wife of Bath, the Knight and the Squire, and the Sumpnour and the Pardoner, chatted and laughed and flirted. Cade's White Hart was also burned. The fire engines were first worked with hose-pipes at this fire, and rendered good service. [FIRE ENGINES, MANUAL, this date.] It was prob. owing to these that the conflagration was stayed at St. Thomas's Hospital. A tablet over the court-room entrance in the old hospital said, "In the midst of judgment, God remembered Mercy, and by His goodness in considering the poor and distressed, put a stop to the fire at this house, after it had been touched several times therewith, by which, in all probability, all this side of the Borough was preserved."

The *London Gazette* of the 29th May states that the Duke of Monmouth,

- 1676 Earl Craven, and the Lord Mayor, did all they could to stop the conflagration, and Charles II. himself went down the Thames in his barge, "to give such orders as His Majesty found fit for putting a stop to it."
- " Wem (Salop). Greatly damaged.
- 1677 Glasgow. 130 houses and shops destroyed.
- " Edinburgh. See FIRE PROTECTION, this date. (1700.)
- 1678 The Temple (London). Great fire, which extended from Brick Court to the Temple Church, "but the Divell Tavern and the houses next Fleet Street escaped." In this fire Mr. Ashmole's collections of curiosities were consumed. The Devil Tavern is supposed to have been between the Middle and Inner Temple gates. An account of this fire is contained in the valuable collection of news letters in the possession of Lord Mostyn. The barristers at the time of its occurrence were nearly all out of town on circuit, and the authorities hesitated about breaking into their chambers, or it was believed the fire might have been more speedily extinguished. Many most important muniments of title were destroyed.
- " Memel (Prussia). Town completely destroyed. (1540, 1854.)
- 1679 Clerkenwell (London). May 9. New Prison, Clerkenwell. Concerning this fire there was pub. : *An Account of the Fire at New-Prison by Clerkenwell, whereby the greatest part of that House was burnt down on Friday night, May the 9th, 1679. Presumed on very violent suppositions to be set on Fire by a Papist that was there in custody, and by that means escaped. Taken from the mouth of the Keeper of the said Prison. With Allowance.* Lond. printed for L.C. 1679. The writer commences as follows :
 We are sufficiently sensible of the mischiefs of Jesuitical villains ; Sixty-six we hope is not yet, nor ever will be forgot, nor the grand contrivances or petty instruments of that cursed conflagration ; nor have we wanted several instances since of their malice. The same men that first burnt our houses, would quickly burn our bodies ; and had they power would no doubt repeat all the Butcheries of the Marian days. We shall not mention Southwark, Wapping, etc.
 There is nothing further of interest. The "With Allowance," which forms part of the title of this curious pamph., might here well seem open to more than one construction. It simply means that it was "licensed" after the manner of this period of the censorship of the press.
- " Marlborough (Wilts). Town seriously damaged. (1653, 1681.)
- " Constantinople. Sept. 6. The old palace burned. A diamond of 96 carats weight was lost, and being afterwards found in the ruins disfigured, was sold for 3 paraces (about 2½d.) ; and afterwards resold for about 2s. 6d. English. (1665, 1729.)
- 1680 Furth (Bavaria). Again destroyed. (1634.)
- 1681 Southwark (London). Considerable fire.
- " Marlborough (Wilts). Very serious fire. (1679, 1690.)
- 1682 Wapping (London). Nov. 22. Nearly 1000 houses burned or blown up, and many lives lost. Of this fire we find the following circumstantial account in the *Wallington Journal* (MS.) in the Guildhall Library :
A True Account of the Dreadful Fire which happened on Sunday the 19th of November, between 10 and 11 at Night in Wapping. As also of what persons were Hurt and Burnt and of one that was taken suspected to have Fire-Balls. 22 Nov. 1682.
 Amongst the many judgments wherewith God Almighty has been pleased to punish this Nation and this City, that of Fire has been the severest, considering since the late dreadful Fire (of almost consuming this whole City) there hath happened several great Fires, as that of the Temple, that of Covent Garden, that of Southwark, and many others ; togr. with this last at Wapping which I shall declare the very truth of, having it of one that was an Eye Witness of it : which I take as follows.
 On Sunday, about 10 a clock at Night, in Cinamon Street in Wapping happened a very dreadful Fire, which as 'tis said, began at one Mr. Allens, a Master of a Ship, close by Sir William Warrens, which was a great Wood-yard on the one side, and Mr. Ricrafts on the other, a Timber Merchant likewise. It Burnt very furiously, and in a short time laid the Street wholly in Ashes, to the great affrightment of all the Inhabitants in those parts.
 There was a great Ship a Building in the Dock, hard by Sir William Warrens House, which belonged to one Sir John Whitewand who proffered and gave £200 to the Seamen to save her which with great labour and pains they did, it being a Miracle to all the future Spectators how she escaped, considering the Houses that were burnt so near her, and a great quantity of Timber that lay there was likewise consumed.
 It burnt all Monday Morning up towards Wapping Wall and about 12 at Noon it took hold of a great Pile of Building called the Old Whater-house, which it Consumed in less than an hour, and then, it crossing the way, Burnt very furiously along the Water Side, and had it not been for the Vigilant care and great Industry of His Grace the Duke of Albermarle, the Lord Craven, and the 2 Sheriffs of London, who not only put courage into those mirrour of men (the Seamen, whose Labour and pains as well in this as in other Fires, might not be forgotten) but also by their Wisdom and direction Ordered several Houses to be blown up, which put some present stop to it, else it had took hold of a great Ship that lay by Wapping-wall, but then the Tide coming in they got her off, and several others that lay on Ground there.
 The Fire notwithstanding the many houses that were blown up continued vehemently Burning up to the Wapping Wall, and so to King Street Bridge, and near to New Gravel

1682 Lane, and could not be stopped there, being many Timber Houses, and others whose out Walls (as is usual thereabouts) were nothing but Deals Tar'd without side, which was but as Tinder to the Fire, so that it was about 4 a Clock in the Afternoon before they could get the head of it, the Wind having been very High and continued Westerly all Night and all Monday.

There were many people destroyed, 3 or 4 of which lay as open spectacles, and 'tis said above 20 more are Burnt and Maimed: one was knocked on the Head by Timber as a House blew up, but it will be some time before the true Account of the loss of Men killed and wounded can be known. The damage that both Rich and Poor have sustained by this Fire cannot yet be computed, the greatest sufferer, if we may give credit to common Report, is Sir William Warren, who hath lost some hundreds a year. There are many Timber Yards Burnt and great Stacks of Coles, and according to most Mens judgments there are about a thousand Houses Burnt and blown up, beside a great number that are spoiled—to particularize of each Mans Sufferings and loss would be to tedious, time will soon shew and discover it, the effects are very Sad, already all the Fields belonging to the Lady Ivey (who was likewise a considerable sufferer in this Calamity, the Poor there much lamenting her, she being eminent for her Charity), and all up to Stepney were filled with Peoples goods, as also those Fields that were between that place and Whitechapel, and several Ships that lay in the River were filled with goods, the like, unless it was the Great Fire, has not been known, it exceeding the computation of most, the great fire in Southwark, and the loss of some Timbermen had been far greater had not they by great help saved their Wood in the River, how this Fire came is not yet known. The report (as in such Accidents) being various, many affirm it was by the carelessness of a Sarvant, who being to Rise early to wash on Munday Morning, let the Candle stand burning by her, and she falling asleep, it took hold of the Bed; others say it came by carelessness of a Sawyer who lay at a Garret of the same House, and fell suddenly a sleep setting his Candle burning by him, he being little less than Drunk when he came home, but the truth of that, as also the loss, the No. of Houses Burnt, the Men slain and wounded, must be left for future time to discover, and it would be well if this might be a warning to all negligent servants, who by their carelessness may ruine more families in a day and a Night, than a whole Age may Repair again. There was a fellow Seized, and they said several Fire Balls were took about him, they hurried him away to the Watch-house, and there sheltered him from the people, who otherwise had knocked him on the Head. More of which you may shortly have an Account of.

The Lord Craven stayed there all the time, and the Duke of Albermarle came away about 2 o'clock, but returned about 4, and stayed till he saw it was quite mastered, which about 6 o'clock at Night was conquered, the Wind then being much abated, but before it could be fully stopped they were fain to Blow up 5 or 6 Houses just before a great Wood yard, and a Brew House, upon which several Engines very much played, and by the great help and encouragement of the Men by Money and Strong Drink they preserved them both, as also a Quakers Wood yard near adjoining: he liberally bestowed his Money to all that would work, upon which they quickly cleared his Yard of all the Timber. Many poor people were fain to lye in the Church and Church yard that Night with their Goods, having no Friends at present to go to. On Tuesday morning some began to dig in their Cellars to find what Iron or other things the Fire had not consumed, so in a short time, 'tis not questioned, but a true account of the Dead will be given.

Thus we see as we increase our Sins God has more judgments in store for us: God grant that every one may amend their lives, and that this may be the last Fire that may happen to this great City or Suburbs thereof.

Several fire engines were present at this fire, but were of comparatively little avail.

There was also pub.: *An account of the dreadful fire which happened on Sunday, the 19th of November, between ten and eleven at night, in Wapping; as also of what persons were hurt and burnt and of one that was taken, suspected to have fireballs.* Folio. London, 1682.

1682 3. *Newmarket* (Cambs). March 22. About 8 o'cl. at night there suddenly broke out a terrible fire at Newmarket, which consumed about half the town. The King (Charles II.) by the approach of the fury of the flames was immediately driven out of his own palace, and removed himself to another quarter of the town, remote from the fire, and as yet free from any annoyance from smoke and ashes. There H.M. finding he might be tolerably accommodated, resolved to stay, and continue his recreations as before, till the day first appointed for his return back to Lond. But he had no sooner declared that resolution, when the wind, as conducted by an invisible power, suddenly changed about, and blew the smoke and cinders directly on his new lodgings, and in a moment made them as untenable as the other. Upon which, the King being put to a new shift, and not finding the like convenience elsewhere, immediately declared he would speedily return to Whitehall, which he did very shortly afterwards. This was called "A Providential Fire."—*Echard*, vol. iii. p. 669.

1684 *Dublin*. April 7. Great part of Castle burned. (1362, 1792.)

" *Beaminster* (Dorset). Burned a second time. (1644.)

1686 *Landau* (Bavaria). City almost destroyed.

1687 *London*. March 27. Fire in Whitecross Street, of which there was pub.: *A True Account of that Dreadful Fire which happened in the House of Mr. Samuel Seaton, a Pewterer at the Corner of Whitecross Street, over against Cripplegate Church, London 27 March, 1687, which consumed 7 persons.* 4to. Lond. 1687.

1688 *Balasore* (Hindustan). Nov. The English Factory burned.

1689 *Southwark* (London). Serious fire.

" *Londonderry* (Ireland). Town-hall burned during siege.

- 1689 *Omagh* (Ireland). Town, with church and castle, destroyed by the soldiers of James II. (1742.)
- " *Newry* (Ireland). Burned by the Duke of Berwick.
- " *Copenhagen*. The beautiful Palace of Amalienburg destroyed; upwards of 300 persons perished.
- " *Eisleben* (Prussian Saxony). June. The house in which Martin Luther was born destroyed by fire.
- " *Prague* (Bohemia). The Jew quarter of the city destroyed. (1754.)
- 1690 *Marlborough* (Wilts). Town considerably damaged. (1681, 1738.)
- " *Cavan* (Ireland). Burned.
- 1691 *Whitehall* (London). April 10. Considerable portion of Old Palace destroyed. (1619, 1698.)
- 1692 *Salem* (Massachusetts). Great damage.
- 1694 *Warwick* (England). Sept. 8. More than half the town destroyed, and the castle greatly damaged. A national collection was made by means of BRIEFS, under which £110,000 was raised. Queen Anne gave £1000.
- " *Dieppe* (France). July 13. Nearly destroyed during siege by English.
- 1696 *Southwark* (London). Dec. 18. St. Thomas's Hospital. This fire threatened to become one of great magnitude, but the fire engines rendered efficient services. [FIRE ENGINES, MANUAL.] The fire originated under the hearth of the new hall, the timber bearers having been burned through, and it extended to a closet adjoining. Among the payments made by the Governors after the quenching of the flames was an amount of 16s. 9d. to "thirty-six seamen, patients and others in the house, and some women, that carried away the rubbish, mopped up the water, and wrought in the fire to stop it by carrying water—some at 6d. a piece, some at 3d."
- 1697 *Stockholm* (Sweden). The Royal Library burned.
- " *Westminster*. April 16. Derby Court. It was out of this fire, the loss from which was estimated at £3035, that the exposure of the abuses practised in connexion with "King's Briefs" arose. See FIRE BRIEFS.
- 1698 *Whitehall* (London). Jan. 4. The Old Palace completely destroyed, in a fire of 17 hours' duration. Regarding it there was pub. :
A Full and True Account of a most Dreadful and Astonishing Fire which happened at Whitehall, and begun in Col. Stanley's lodgings, on Tuesday last, about 4 o'clock in the afternoon, continuing with great violence until about 9 o'clock the next morning, burning down and consuming the King's Chapel, the Guard Chamber, the Long Gallery, etc., together with near 150 Houses. An Account also how several persons were killed, with the blowing up 20 Houses, etc. Licensed according to Order. Lond. Printed by G. Bradford, in Little Britain, 1698. Fo. containing 2 pages.

Many and various have been the relations concerning this dreadful and surprising accident, some affirming it had its beginning in one place, and some in another, and yet all, or most of them remote from truth; therefore, for satisfaction of all such who desire to be truly informed in these unhappy and amazing particulars, I have pub. this following account, viz.

On Tuesday last, being the 4th of this instant, January, 1698, betwixt the hours of 3 and 4 of the Clock in the afternoon a Dutch woman who belonged to Col. Stanley's lodgings (which were near adjoining the Earl of Portland's house at Whitehall), having sudden occasion to dry some linnen in an upper room (for expedition sake) lighted a good quantity of Charcoal, and carelessly left the linnen hanging round about it, which took fire in her absence to such a degree that it not only consumed the linnen, but had seized the hangings, wainscots, beds, and what not, and flamed and smoaked in such a violent manner, that it put all the inhabitants thereabouts into consternation as well as confusion, not knowing from whence it proceeded, insomuch that the unhappy Dutch woman could not return; so that in an instant (as it were) the merciless and devouring flames got such advantage, *that notwithstanding the great endeavours used by the Water Engines, numerous assistance, and blowing up houses to the number of about 20, it still increased with great fury and violence all night, till about 8 of the clock next morning, at which time it was extinguished, after it had burnt down and consumed (according to modest computation) about 150 houses, most of which were the lodgings and habitations of the chief of the nobility.*

Such was the fury and violence of this dreadful and dismal conflagration, that its flames reduced to ashes all that stood in its way, from the Priory Stairs to the Banqueting-House, and from the Priory Garden to Scotland-yard, all on that side, except the Earl of Portland's House and the Banqueting-House, which were preserved, though much damaged and shattered. The fire proceeded close to the Gate by the Duke of Ormond's lodgings, before it could be extinguished. The most remarkable houses which were consumed by these astonishing flames are the Guard-Chamber, Council-Chamber, Secretary's Office, the King's Chapel, the Long Gallery to the Gate, the Queen's Lodgings, Duke of Devonshire's, etc., but not the Earl of Portland's, as has been impudently affirmed in a late scandalous and ridiculous pamph. The danger done by this fiery disaster, is at present unaccountable, considering the vast riches that were contained among those noble families; therefore consequently their loss must be very great, and might have been much greater, had not the officers of the Guards taken care to stop the numerous Crouds from pressing forward into houses where goods were remaining.

It was confidently affirmed, that 20 or 30 persons were killed, but, blessed be God, upon a strict inquiry, I cannot learn that above 12 persons perished, among whom were 2

1698

grenadiers, a waterman, and a painter; who endeavouring to reach out some goods at a window, while the house was on fire, a piece of iron fell upon his head and beat out his brains. The like fate had a gardener, by the blowing up of a house: yet it is certain many more are dangerously wounded.

The Banqueting-House, though not much injured by the Fire, except that part next Westminster, yet all parts of that renowned and ancient building are so much shattered and disordered, that it little resembles what it was the day before; as are also most houses thereabouts, whose inhabitants were under the apprehension of danger, particularly the Duke of Ormond's at the Gate, which is not only cleared of all its rich furniture, but of all hangings whatsoever that could possibly be got out, during the fury of the fire.

To conclude, it is a dismal sight to behold such a glorious, famous, and much renowned palace, reduced to a heap of rubbish and ashes, which the day before might justly contend with any palace in the world, for riches, nobility, honour and grandeur. God save King William.

Note.—There is a scandalous, lying, and ridiculous pamph. pub., which asserts that the Earl of Portland's and Duke of Shrewsbury's houses are burnt; which is notoriously false, they being both standing, having received no damage by the fire; with other impertinancies which the printer is ashamed to set his name to, or the place where he lives: only a counterfeit one, like his pamph.

We give this publication—which is reprinted in the *Harleian Miscellany*, vol. x. p. 359—entire, not only on account of the interesting details, but because it is one of the earliest we have met with of those Official or Semi-official Accounts of fires which became so general about this period. This is stated to be "Licensed according to Order;" and it is more than prob. that some person obtained a patent for the right of publishing these accounts—which after the interest created by the Great Fire of London prob. had a great sale in the country—of which we shall meet with more hereafter. (1691.)

" *Limehouse* (London). A considerable fire. No details.

The continuance of these large fires in and round Lond. still kept alive the idea of a "Popish Plot." In a pamph.—*The Quakers Remonstrance to Parl. etc., Touching the Popish Plot, and Sir Edmundbury Godfrey's Murder; much of which not being unseasonable at this juncture, it is now reprinted: as also to show that the Quakers were formerly as zealous against Popery, as any others; notwithstanding they have so much appeared to the contrary of late.* Licensed the 15 June, 1689. Lond. printed 1689, and sold at several Booksellers. Quarto, 8 pages—there is the following passage:

When the noise of fire and sword is in our ears; when we cannot walk the streets without being stabbed, nor sleep in our houses for fear of being burned: witness the dreadful fire of Lond., the fire of Southwark, and that the other day of Limehouse, . . . to say nothing of 40 attempts they have made in other places. To which, let me add, the design in general, of massacring all the best people in the kingdom.

1700

Edinburgh. Feb. 3. North-east corner of Meal Market. "All that magnificent pile of buildings (exclusive of the treasury room) on the eastern and southern sides of the Parliament Close, with the Exchange, were destroyed."—*Maitland.* (1677, 1771.)

"

Charleston (U.S.). Nearly destroyed; hurricane and fire.

1702

Port Royal (Jamaica). Jan. 9. The entire town burned; but much of the merchandize saved by means of H.M.'s ships lying in the harbour. (1750.)

"

Bergen (Norway). May 19. Large portion of town destroyed.

1703

Norfolk (England). Nov. 26. During the height of the great storm of this date, a town in Norfolk [name not given] was almost ruined by a serious fire, which burnt with such vehemence, and was so fanned by the tempest, that the inhabitants had no power to concern themselves in extinguishing it; the wind blew the flames together with the ruins, so about, that there was no standing near it; for if the people came to windward, they were in danger to be blown into the flames; and if to the leeward, the flames were so blown into their faces, they could not bear to come near it.—*Hist. of the Storm*, p. 36.

"

Port Royal (Jamaica). Destructive fire. (1750.)

1706

Moscow. June 19. Considerable fire this year, during which the "Great Bell" fell from its position. (1752.)

"

Erlangen (Bavaria). Seat of the Protestant University. Suffered severely by fire.

1707

Shadwell (London). May 13. About 100 houses burned or damaged. The following details of this fire we obtain from a printed sheet purporting to be issued on the day of the fire, and stated to be "Licensed according to Order":

A Full and True Account of a great and most dreadful Fire which happened between 12 and 1 of the clock this Tuesday morning the 13th May, at one Mr. Shaw's house, a Victualler living at the sign of the New England Arms, near Bell Wharf in lower Shadwell; having burned down threescore Houses, damaged forty two, and quite ruined a great many families, to the Loss of above One hundred thousand pounds, besides the unfortunate Burning of about nine or ten Men,

1707

Women, and Children, particularly two of Mr. Shaw's Children, in whose House the terrible Fire first began.

Yesterday being *Monday*, the 12th of this instant May, there being a burial at one Mr. Shaw's, who keeps a Victualling-House at the sign of the *New England Arms*, near *Bell Wharf*, in *Lower Shadwell*, some men that lodg'd in his House, and being come home from the Funeral, instead of reflecting on the miserable circumstances of mortality, they got Drunk; and when they went to bed, which was about 12 o'clock at night, being careless of their Candle, it took fire on the curtains, and in less than half an hour the House was all in a Blaze, and the Houses thereabouts being most old Buildings, so furious were the flames, that in four or five hours they had, on *Tuesday*, the 13th inst., burned down Sixty Houses to the ground, and damaged above Forty Houses more.

This dreadful Fire happening so unfortunately in the dead time of the night as one may say, and displaying its Fury with great expedition, the Inhabitants thereabouts, instead of saving their Goods, were forced to fly for their Lives, being put to the terrible Nonplus of not having time to dress themselves; insomuch that Men, Women, and Children were running in their Shirts and Shifts about the Streets to seek for shelter in their friends or relations Houses, making the most dismal Outcries and Shrieks imaginable. Husbands for the Loss of Wives, Wives for the Loss of Husbands or Children, and Children for the Loss of both; for in the Merciless Flames about Ten Men, Women, and Children are already known to be burnt; particularly two of Mr. Shaw's Children in whose House the Fire first began; and several other persons are missing, whom 'tis fear'd are come to the like deplorable End. Moreover, the Fire getting to such a Head that people had not time to save their Goods, nay a great many not so much as a Bed to lie upon, the Damages thereof, with the destruction of Threescore Houses, besides as many more in a manner as bad as *Burnt*, is computed to be no less than above Two Hundred Thousand pounds. There were about half a score Engines, which being briskly plaid, and the Ins. Officers men very diligent to suppress the same, they conquer'd the Flames, without blowing up any Houses, by between five and six of the clock this morning, which is one of the most dreadful Fires which has happen'd about London for above these twenty years.

A copy is preserved in the Library of the Corp. of Lond. "Briefs" were issued in regard to this fire.

"
1708

Lisburn (Ireland). Burned.
London. Feb. 9. St. Clement Danes and St. Martin's in the Fields. Large fire, burnt down 36 houses, while 14 others were demolished in view of preventing its spread. About 100 families were rendered homeless. The sworn damage was £17,880 5s. 6d. A Brief was issued.

1709

Epworth (Lincolnshire). A fire occurred at the parsonage house which assumed a real historical importance. The house was then occupied by the father of the Rev. John Wesley. The infant son was left in his cradle, forgotten, when all the others had escaped. Finally he was rescued just before the roof fell in. He became the founder of the So. of Methodists which bears his name. More than a century later [1839] a "centenary picture" was pub. entitled "Fire at Epworth, 1709." This was largely subscribed for.

"
1711

Oederan (Saxony). Town nearly destroyed. (1733.)
Boston (U.S.). Oct. 2. About 100 houses destroyed. In connexion with this fire there was pub.: *An Account of the Gt. Fire in Boston in the year 1711, prefixed to a Sermon preached by Dr. Cotton Mather, two days afterwards, at the Public Lecture (sic) in the South Meeting House; with some extracts from the Sermon.*

1712

London. Serious fire in Covent Garden, concerning which the following remarkably explicit statement appeared:

A Full and True Account of a most cruel and dreadful Fire, which happen'd betwixt two and three this morning in King Street, Covent Garden, and burnt down the Crown and Cushion, being the House where the Indian Kings liv'd, and several other Houses; having done near 10,000 pounds damage.

Notwithstanding the good and wholesome laws provided of late for punishing wicked and careless servants in these cases, by Fines and Imprisonment, etc., yet they won't take warning, but generally are the occasion of the Calamities of this nature, a dismal instance of which we have in the following relation.

The Crown and Cushion above said being a very large and fine House (an Upholsterer's by Trade), have usually several gentlemen Lodgers, and it happen'd that one of 'em tarry'd out late last night about business, but his man was at home, and sat up for him, but being in drink, and consequently falling asleep, the Candle took hold of the window curtains, which firing the hangings, the room was instantly all in flames, when the fellow presently awakening, cry'd out, and the whole family had the good fortune to save their lives by running down, tho' the fire began one pair of stairs, and has burnt entirely not only that House, but four or five backwards.

A great many rich beds are burnt, and quantities of silk not made up, with all sorts of the most richest furniture, to the damage of above £9000, very little being sav'd.

The servant that carelessly set it on fire, it's said, will be sent to the House of Correction, and fined, pursuant to the late Act.

In reference to the Act here referred to, see FIRES CAUSED BY NEGLIGENCE.

"
1713

New York. The Indians made an attempt to burn this city. (1811.)
Blandford (Dorset). July 9. Great number of houses burned; thatched roofs. (1731.)

1715

London. Jan. 13. Thames Street. This fire began in the house of Mr.

- 1715 Walker, an oilman, in Thames Street, and was occasioned by making fireworks against the King's coming to St. Paul's. The house blew up; the fire extended, and in all consumed more than 100 houses, extending into Tower Street. The fire was regarded as the greatest since 1666. Regarding it there is preserved: *A Sermon preached in London, Jan. 16, 1714-5, on occasion of the dreadful Fire which began in Thames Street on Thursday, Jan. 13.* By John Evans. 8vo.
- 1716 London. Dec. 2. The French Chapel, together with its Library, and several dwelling-houses in Spring Gardens, were destroyed by fire. The Prince of Wales [afterwards Geo. II.] attended, and aided in extinguishing it. [FIREMEN, 1716.]
- " Wapping (London). Dec. 4. Nightingale Lane. 150 houses burned; 50 lives lost. We have given some remarks on the want of order and system exhibited at this fire under FIRE EXTINGUISHMENT, at this date. The then Prince of Wales contributed £1000 to the sufferers. He was prob. present at it. Several of the early fire offices advertised their payment of claims arising out of this fire.
- " Paris. Fire in wax-chandler's shop, Rues St.-Martin et Neuve-St. Méry. Threatened to burn the entire quarter. The Fire Brigade of Paris was much strengthened after this. (1763.) [FRANCE, Fire Ins.]
- 1718 London. Custom House burned. (1814.)
- " Cölin or Koslin (Prussia). This ancient city destroyed.
- 1719 Carlstad (Sweden). Suffered severely. (1660, 1752.)
- 1720 Rennes (France). Dec. 22-29. Fire lasting a week consumed 850 houses.
- 1723 Klagenfurt (Illyria). Destructive fire. (1535, 1796.)
- 1724 Woburn (Bedfordshire). Town destroyed.
- 1725 London Bridge. Burned. (1633, 1758.)
- 1726 Hilversum (Holland). Greater part of village burned. (1766.)
- 1727 Gravesend. Aug. 24. 120 houses with other buildings destroyed; damage £200,000. (1844.)
- " Burwell (Cambridge). Sept. 8. A barn in which 160 persons had assembled to see a puppet-show was set on fire by carelessness, and all but 6 perished.
- 1728 Copenhagen. 1650 houses, 77 streets, 5 churches, the University, and 4 Colleges burned. (1689, 1794.)
- 1729 Constantinople. 12,000 houses burned, and 7000 inhabitants. (1679, 1745.)
- 1731 Brussels. Jan. 25. Fire at Arch-Duchess's Palace, which, with the Royal Chapel, was speedily consumed. All the records of State contained therein were consumed.
- " Enniscorthy (Ireland). Mar. 15. About 42 houses consumed, and other damage.
- " London. April 28. White's Chocolate House, near St. James's Palace, and 2 other houses burned. Fine collection of pictures belonging to Sir Arthur Fountain burned. The King and Prince of Wales were each present at this fire, and encouraged the firemen, and afterwards liberally rewarded them, as also those who worked the engines.
- " Ramsey (Hunts). May 21. Village destroyed.
- " Blandford-Forum (Dorset). June 4. The whole of this town, with the exception of 26 houses, destroyed; buildings mostly thatched. The loss, after deducting all insurances, was found to amount to £84,348. Towards meeting this, "King's Briefs" were issued, under which about one-third of the loss was recouped after paying the expenses of collection.
- There was published in 1735: *A Brief Account of the Dreadful Fire at Blandford-Forum, in the County of Dorset, which happened June iv. M.DCC.XXXI. Together with a Sermon, preached at Blandford, June 4, 1735, being the day set apart by the Protestant Dissenters there for Prayer and Humiliation under the Remembrance of that Sad Providence. To which is added a Serious Address to the Inhabitants of that Town.* By Malachi Blake. "This Treatise is not only calculated for the inhabitants of Blandford, but proper for other Families also." (1713.)
- " Tiverton (Devon). June 4. 200 houses destroyed. The people lay in the churches and meeting-house, and some in the fields. Loss £150,000. There was pub. by Mr. Sam. Smith, Master of the Free School: *Account of the Dreadful Fire at Tiverton, Devon.* (1612.)
- " London. July 4. A large number of vessels burned on the Thames through the overturning of a pot of boiling pitch.
- " Wellingborough (Northampton). Aug. 14. Burned. (1738.)
- " Barnwell (Cambridgeshire). Sept. 30. Village burned down entirely. (1751.)
- " Cockthorpe (Norfolk). Oct. 3. The greater part of the village consumed.
- " Ashburnham House (Westminster). Oct. 22. Fire broke out in the building, greatly damaging the King's and Cottonian Libraries (which had been

- 1731 removed there the previous year), and which formed the nucleus of the Brit. Museum Lib. Out of 958 MS. vols., 114 were destroyed or rendered useless, and 98 damaged. The valuable MS. for Dr. Bentley's Greek Testament (10 years' labour) was also destroyed.
- " Wareham (Dorset). Town burned. (1742.)
- " Baireuth (Bavaria). 5000 houses in this town were laid in ashes in less than 2 hours!
- 1733 Aylesbury (Bucks). May 6. Upwards of 30 houses, and many buildings and much property, destroyed in about 2 hours.
- " Oederan (Saxony). Town nearly destroyed. (1709, 1753.)
- " London. Oct. 16. Berkeley House, Piccadilly (Duke of Devonshire's), burned in the day-time. The Prince of Wales was present and assisted to extinguish this fire. [FIREMEN.]
- 1734 Madrid. The Old Palace destroyed.
- " Liege (Belgium). The Palace of the Prince and the Bishop of the City, "one of the fairest and most magnificent in Europe," burned to the ground.
- " London. July 23. Butcher Row, by Temple Bar; 8 houses burned and many others injured.
- 1735 London. Jan. 8. St. Katherine's near the Tower, about 40 houses destroyed.
- " London. June 9. St. Martin's Lane; 13 houses burned and others injured. Fire wilful.
- " Delhi (Hindustan). Partly burned by the Mahrattas.
- " Liverpool. Town-hall partly destroyed. (1802.)
- 1736 Stony Stratford (Bucks). May 20. About 50 houses burned. (1742.)
- " Peasmore (Berks). Aug. 11. Greater part of village burned.
- " St. Petersburg (Russia). Aug. 12. 2000 houses and warehouses destroyed, the post office, and several palaces also. (1780.)
- " Shadwell (London). Sept. 10. 42 houses, 6 warehouses, and 8 sheds burned. Much other property damaged. (1763.)
- 1737 London. Jan. 31. Fire at the Inner Temple, about 30 sets of chambers destroyed. The Prince of Wales was present and encouraged the firemen, and gave orders to the soldiers to assist.
- " New Brandenburg (Prussia). Town burned to ashes.
- " Jeneköping (Sweden). The city burned, destroying the castle, church, and many fine buildings; the Magazine blew up, doing much damage.
- " Panama (New Granada). Entirely destroyed.
- " Moscow (Russia). 12,000 houses, with palaces, etc., destroyed. (1570, 1748.)
- " Jaroslaw (Muscovy). 2500 houses burned.
- 1738 London. Jan. 14. Mr. Basket, King's printer's premises burned, including "the noble printing house." Damage £20,000.
- " London. July 1. Messrs. Kid & Harbin's sugar-houses near Queenhithe; above 20 warehouses and buildings in all, with Mr. Hill's meeting-house.
- " Wellingborough (Northamptonshire). July 28. About 205 dwelling-houses, 806 out-houses and buildings burned. Total damage about £26,000, of which about £2000 was insured. (1731.)
- " Fakenham (Norfolk). Aug. 4. Greatly damaged by fire.
- " London. Oct. 21. Gally Key, near Custom House; 12 warehouses and large quantity of produce burned. Damage £30,000.
- " Marlborough (Wilts). Town seriously burned. (1690.)
- " Martinique (West Indies). About 100 warehouses of sugar, coffee, and other produce burned; damage 12 millions of livres.
- " Wyburg (Finland). The entire city, except a few houses, burned.
- 1739 Finedon (Northamptonshire). March 9. Great part of village destroyed.
- 1740 Bradford (Wilts). April 30. Burned.
- " Exeter. Fire; no details.
- " Dublin. Considerable fire.
- 1741 London. Jan. 8. 20 houses burned, Pickle Herring Stairs, opposite Tower.
- 1742 Southam (Warwickshire). March 5. 40 houses burned.
- " Kentbury (Berks). April 10. Considerable fire.
- " Stony Stratford (Bucks). May 6. 150 houses burned. (1736.)
- " Wadlington (Oxfordshire). May 6. Greatly damaged.
- " Smyrna. June 20. Destroyed by fire. (1753.)
- " Shipwash (Devon). Village entirely destroyed.
- " Wareham (Dorset). Town burned. (1731, 1762.)
- " Omagh (Ireland). Town burned. (1689.)
- " Attendarn (Westphalia). Town destroyed. (1783.)
- 1743 Crediton (Devon). 450 houses destroyed; thatched roofs. (1769.)
- 1744 Debenham (Suffolk). March 1. About 38 houses burned.
- " Haxey (Island of Axholme, Lincolnshire). March 4. 56 houses, 119 barns, buildings, etc., destroyed; damage £10,000.

- 1744 *London*. June 11. Thames St., Sir Wm. Calvert's granary and great stores of produce burned. The Prince of Wales present and distributed 100 guineas to firemen.
- " *Brest* (France). Magazines, etc., destroyed; stores valued at £7,000,000, in add. to buildings.
- 1745 *London*. May 14. George Stairs, Horsleydown; 22 houses and several ships; damage £20,000.
- " *Dumfries* (Scotland). Burned by the Highland army.
- " *Constantinople*. Fire lasted 5 days; extent of damage not recorded. (1729, 1749.)
- 1746 *London*. Dec. 1. Pope's Head Alley, Cornhill, partially destroyed.
- 1747 *Limehouse* (London). May 25. 11 houses burned in Ropemakers Fields, and other property destroyed.
- " *Honiton* (Devon). July 19 (Sunday). 178 houses, "besides out-houses, stables, and other edifices, were entirely consumed by the flames; which were valued by honest and understanding men at £35,600: and the goods of poor artificers burnt therein, in woollen, linen, and mercery goods, amounted, at a moderate computation, to the value of £8000." An adv. was pub. in the newspapers by authority of the Port-reeve, Reeve, and other principal inhabitants, vouched for by some of the greatest men in the county, which certified that the fire consumed the greater part of the town.—*City Remembrancer*.
- " *Royston* (Herts). Aug. 23. 36 houses and great quantity of grain burned. (1406.)
- " *Boston* (U.S.). Dec. 9. The Court House, with numerous important State papers, burned. (1753.)
- 1748 *Flushing* (Zealand). Jan. Damaged by fire. Prince of Orange's house burned.
- " *Kinsale* (Ireland). Jan. 27. Prison and barracks burned; 600 prisoners of war; all but 54 were conducted safely to another prison.
- " *London*. March 25. Cornhill—200 houses burned. This fire began in Change Alley, and was regarded as the most terrible since the Great Fire of 1666. The early fire offices suffered severely; but the fire led to a great increase in the practice of Ins. It was prob. in consequence of witnessing this fire that Dr. Johnson wrote: "The conflagration of a city, with all its turmoil and concomitant distress, is one of the most dreadful spectacles which this world can afford to human eyes." The library and works of art of Gustavus Brander, Esq., F.R.S., F.S.A., etc., narrowly escaped destruction at this fire. There was pub.: *A Sermon preached at the Haberdashers' Hall, March 27, on occasion of the dreadful Fire in the City on March 25, 1748*. By Thomas Gibbons. 8vo.
- " *Moscow* (Russia). June 1. 5000 houses, including those of many of the nobility, also 3 churches, burned; 482 persons lost their lives. (1737, 1750.)
- " *Barkway* (Herts). Aug. 18. Considerable damage.
- " *Hamilton* (Scotland). Sept. 24. Considerable fire.
- " *Wischna* (Russia). City consumed. (1754.)
- 1749 *Deptford* (Kent). The Gov. Victualling Yard destroyed, with several lighters. The tide being out and water scarce, the engines played several barrels of beer on the fire. Loss £200,000. (1652.)
- " *Cazan* (Russia). May 14. The city and suburbs consumed.
- " *Glasgow*. June 4. Great fire; above 200 families burned out.
- " *Southwark* (London). Aug. 12. 80 houses, brewhouse, cooperage, several lighters, large quantity of malt, hops, coals, and beer, etc. Loss £50,000.
- " *London*. Aug. 29. Poultry. Considerable fire. The prisoners for debt in the Counter released. Out of 50, 40 returned. Of 9 felons only 1 was recaptured.
- " *Newport* (Salop). Sept. 3. About 20 houses burned.
- " *Towcester* (Oxfordshire). Oct. 25. 25 houses, with numerous other buildings, burned.
- " *Constantinople*. Considerable fire, some thousands of dwellings destroyed. (1745, 1750.)
- 1750 *Constantinople*. Jan. 24. A prodigious fire, consuming about 12,000 houses, or an eighth part of the city.
- " *Constantinople*. Later. The Palace of *Musti*, and 30 houses.
- " *Munich*. March 5. The Electoral Palace, a superb edifice, "esteemed by architects the most regular and beautiful piece in Europe," burned; including many fine paintings and other valuable effects.
- " *Constantinople*. April 25. Fire in the market (considered to be fireproof). Great quantities of jewels and merchandize and part of city treasure destroyed. Loss estimated "from 10,000 to 30,000 purses." (1749, 1751.)

- 1750 *Port Royal* (Jamaica). April. About half the town burned, with much produce; loss £100,000. (1702.)
- " *Halifax* (Nova Scotia). July 11. Considerable fire, which at one time threatened to destroy the town.
- " *Benge worth* (Worcester). Aug. 25. 12 houses and other buildings burned.
- " *Bellingham* (Northumberland). Aug. 25. 25 houses burned.
- " *Newcastle-on-Tyne*. Aug. 28. "Largest fire ever known here." Consumed large brewhouse, 10 dwelling-houses, warehouses, etc.
- " *Italy*. Sept. The great Forest of *Caserta* burned.
- " *Gillingwood* (York). Dec. 11. Burned down.
- " *Moscow*. Another great fire. The building of wooden houses prohibited. (1748, 1752.)
- 1751 *Amesbury* (Wilts). June 5. 32 houses consumed; £10,000.
- " *Stockholm*. June. A series of fires occurred this month, by which about 1000 houses were reduced to ruins; foul play was suspected. (1759.)
- " *London*. Aug. 12. Cotton's Wharf, and 3 large warehouses, including house of master carpenter of London Bridge; damage £40,000.
- " *Constantinople*. Aug. 19. Fire lasted 10 hours; burned 4000 houses. (1750, 1753.)
- " *Barnwell* (Cambridge). Sept. 30. Destroyed. (1731, 1757.)
- " *Norwich*. Oct. 27. Considerable fire; destroyed part of the Bridewell.
- 1752 *Elden* (Norfolk). June 4. The whole of the village, except 4 houses, destroyed.
- " *London*. June 27. New Square, Lincoln's Inn. Great number of valuable title-deeds and documents burned; especially the title-deeds to Lord Leigh's estates.
- " *Carlstad* (Sweden). Suffered severely. (1719.)
- " *Moscow* (Russia). May 23. About 5000 houses burned. June 3, another fire near Kremlin; 13,000 houses burned. June 6, still another fire. In the whole about two-thirds of the city burnt, including churches, convents, etc. (1750, 1753.)
- " *Pierre* (Martinique). Oct. 700 houses burned.
- 1753 *Wexco* (Gothland). April 17. The Custom House and a great number of dwellings burned.
- " *Subla* (Forest of Thuringia). May 1. About 300 houses, Cathedral, Town House, and other buildings burned.
- " *Opotshka* (Russia). May 13. Two-thirds of the town and 2 churches were destroyed.
- " *Smyrna*. May 14. Considerable fire; later in the year another, consuming the whole of the Armenian quarter. (1742, 1763.)
- " *Constantinople*. May. Several fires. Fire engines from Dutch and English factories attended. (1751, 1754.)
- " *Moscow*. May. A series of fires more or less destructive. (1752, 1753.)
- " *Elbingerade* (Hanover). May 27. 250 houses, the church, and other property consumed.
- " *Soligny* (France). June 5. Whole town, except the church and 2 or 3 houses, burned.
- " *Holmes Chapel* (Cheshire). July 10. Town destroyed, except a few houses.
- " *Bielitz* (Upper Silesia). July 25. Castle, with its rich fittings, and 140 houses, burned.
- " *Boston* (U.S.). July. Great conflagration at Bronsdon's wharf; much property and some shipping burned. (1747, 1760.)
- " *Catworth* (Huntingdon). Aug. 3. Considerably damaged by fire.
- " *Dorsington* (Warwickshire). Aug. 3. Greatly damaged by fire.
- " *Lisbon*. Aug. 5. A considerable fire; 30 houses and other property. (1764.)
- " *Southwark* (London). Aug. 11. A considerable fire.
- " *Casan* (Tartary). Oct. 15. City burned. (1765.)
- " *Oederan* (Saxony). Oct. 15. Town burned, except some 30 houses. (1733.)
- " *Archangel* (Russia). Oct. 27. 900 houses and a great number of storehouses burned; damage £250,000. (1667, 1763.)
- " *Moscow*. Nov. 12. The Emperor's Palace entirely destroyed, a diamond worth 100,000 roubles lost. (1753, 1773.)
- " *Jassy* (Moldavia). The greater part of the town burned, including the Palace of the Hospodar and several churches.
- " *Shipshead* (Leicestershire). 150 buildings destroyed.
- " *Orgelot* (France). Fire destroyed 122 houses and ruined all the inhabitants.
- " *Tarvin* (Cheshire). The greater part of the village burned.
- " *Grodno* (Poland). The city destroyed, including monasteries, nunneries, with the Palaces of the Primate and the General of the Crown.
- " *Schoeneverda* (Saxe Gotha). The whole town burned, with the exception of 5 or 6 houses.

- 1753 *Kempenich* (Germany). 59 houses and other property consumed.
- 1754 *Penton* (Wilts). March 9. 15 houses burned.
- " *Königsberg* (Germany). March 9. The Castle of Garbenichen burned (1761.)
- " *Constantinople*. March. 600 houses burned in the Armenian quarter. (1753, 1756.)
- " *Middleton-Stoney* (Derbyshire). April 29. Burned.
- " *Warsaw* (Poland). May 9. A considerable fire.
- " *Prague* (Bohemia). May 11. Considerable conflagration in the Jew quarter.
- " *London*. May 13. Extensive sugar-house and other property near Paul's Wharf. The Lord Mayor, the Sheriffs, and a guard from the Tower were in attendance.
- " *Offan* (near Stratford-on-Avon). May 14. Considerable damage.
- " *Nenagh* (Ireland). June 4. About 112 houses and other buildings burned.
- " *Portsmouth* (New Hampshire). June and July. Great fire in the woods, lasting over a month.
- " *Hindon* (Wilts). July 3. 140 houses (being nearly the whole town) burned.
- " *Polotski* (Poland). 1213 houses, the church and convent of the Jesuits, the churches of the Dominicans and Franciscans, and the great church, destroyed.
- " *Wischna* (Russia). The city consumed. (1748.)
- " *Bonn* (Rhine). The convent and church of the Capuchins entirely destroyed.
- " *Marseilles*. Large magazine and much merchandize burned.
- 1755 *London*. Jan. 13. Billingsgate. Considerable fire.
- " *Southwark* (London). May 5. Hermitage Wharf destroyed. £20,000.
- " *Damerham* (Wilts). July 14. Considerable damage.
- " *Colmar* (Sweden). Oct. 18. Large portion of city destroyed; fire lasted 3 days. (1765.)
- " *Eddystone Lighthouse*. Burned. (1770.)
- 1756 *Bridgetown* (Barbadoes). Feb. 8. 160 dwellings destroyed. (1758.)
- " *Constantinople*. About 500 houses destroyed. (1751, 1756.)
- " *Berghen* (Norway). Fire. 1660 families burned out.
- " *Constantinople*. July. 8000 houses, 200 mosques, 100 people burned. (1756, 1761.)
- " *Maidstone* (Kent). Oct. 3. Damaged by fire.
- 1757 *Morton Hampstead* (Devon). June 24. Great damage. (1816.)
- " *Barnwell* (Cambridge). Dec. 16. Again burned. (1751.)
- 1758 *Bridgetown* (Barbadoes). Feb. 120 houses and large amount of produce. (1756, 1766.)
- " *London Bridge*. April 11. The temporary wooden bridge burned. (1725.)
- " *Savannah* (S. Carolina). July 4. Greatly damaged. (1797.)
- " *Deptford* (London). Sept. 2. The storehouse burned. (1749, 1761.)
- " *Wapping* (London). Sept. 10. A considerable fire.
- " *Pirna* (Saxony). Nov. 10. Suburbs fired by Prussians; 260 fine houses destroyed.
- 1759 *En route*. May 24. Worcester and Lond. Stage Waggon, through bursting of bottle of aqua fortis; loss £5000. There have been many other cases of Stage Waggon burned. A generation ago these were the means by which nearly all merchandize and valuables were transported from place to place. Before the Lond. Fire Offices estab. country agencies, the proprietor of the Stage Waggon conveyed the prems. to town, and in due course returned the pol. There were whole districts of country that obtained and kept up their Fire Ins. in this manner.
- " *Stockholm*. June. About 250 houses; loss 2 million crowns. (1751, 1795.)
- " *Copenhagen* (Denmark). June. Great fire.
- " *London*. Aug. 21. 11 houses, Cherry-tree Alley, Bunhill Row.
- " *Salonica* (Macedonia). Oct. 18. This city of 4000 houses reduced to ashes, and many persons burned.
- " *London*. Nov. 10. Sweeting's Alley, near Royal Exchange; a considerable number of houses.
- " *Northampton*. Nov. 22. "Ten bay of buildings, etc.," consumed. (1675.)
- " *London*. Nov. 30. Duke Street, Lincoln's Inn. Considerable destruction of property, including chapel of Sardinian Ambassador.
- " *Willon* (Wilts). Dec. 5. Considerable damage.
- " *London*. Dec. 23. King St., Covent Garden, and Long Acre, 50 houses. Damage £70,000.
- " *Quebec*. Set on fire during the bombardment by Genl. Wolfe. (1815.)
- 1760 *Hadnam* (Bucks). Between 50 and 60 houses.
- " *Boston* (U.S.). March 20. Some 400 dwellings, stores, with shipping, etc. The *Ann. Regis.* for this year, says: "A most dreadful fire happened

- 1760 March 20, at Boston, in New England, supposed the greatest ever known in the American colonies. Near 400 dwellings, stores, shops, shipping, etc., were consumed, with goods, etc., to the amount in all of about £100,000 sterling. The Governor wrote immediately to the other governments on the continent, desiring their assistance. Near £2000 had been subscribed June 20 by the New England merchants for the sufferers at Boston. Dr. Ward alone contributed £200." (1753, 1761.)
- " London. April 18. Thames St., Fresh Wharf, the roof of St. Magnus Church, many houses, and much merchandize; £40,000.
- " Hemmington (Huntingdon). April 18. 17 houses, with other buildings, burned.
- " Portsmouth. July 3. Dockyard, buildings and stores, valued at £100,000. (1761.)
- " Auburne (Wilts). Sept. 12. 72 dwelling-houses, and much agricultural produce; £20,000. (1777.)
- 1761 Boston (U.S.). Jan. Considerable fire. Faneuil Hall Market and many other buildings destroyed. (1760, 1775.)
- " London. Feb. 10. Fishmongers' Hall and several houses.
- " Deptford (London). Feb. 26. The Red House burned. (1758, 1775.)
- " Goree (Africa). March 14. This Island settlement destroyed.
- " London. April 11. East Smithfield, 28 houses burned.
- " London. April 24. Swallow Street, Regent Street; 14 houses. The servant who negligently caused this fire was fined £130.
- " Wapping (London). May 2. 30 houses and some shipping; £50,000.
- " Kineton (Warwickshire). April 28. 11 houses with many other buildings.
- " Cadix. May 18. Two vessels burned in port. Great loss.
- " Portsmouth. July 4. Dockyard; considerable destruction of stores; £40,000. (1770.)
- " Königsberg. July 10. Large hemp warehouses, etc., burned. (1754, 1764.)
- " Stuttgart (Wurtemberg). Aug. 3. Upwards of 40 houses burned; the person who caused the fire was executed on the spot.
- " Worksop Manor (Notts). Oct. 20. Duke of Norfolk's seat; £100,000. [MANSIONS.]
- " London. Sept. 29. Timber-yard and buildings, Cuckold's Point; considerable damage.
- " London. Sept. 29. Barbican, Garter Court; many houses burned.
- " Constantinople. Sept. 23. A great number of noble palaces, as also of shops, burned; loss "immense." (1756, 1765.)
- 1762 London. Jan. 7. Granary and 8 dwelling-houses in St. Saviour's Docks.
- " London. Feb. 10. Little Carter Lane. Bellman's sugar-house and adjoining property. Whereupon the *Gent. Mag.* spoke as follows: "The sugar-houses are so hazardous that we are told some of the fire offices will not insure them. Why should they be tolerated in the most populous part of the city?"
- " Liverpool. Feb. 20. Considerable damage by fire. (1795.)
- " Tiverton (Devon). May 24. 26 houses burned; fire stopped by blowing up houses. (1731, 1785.)
- " Wareham (Dorset). May 25. Three parts of town; but not the churches. (1742.)
- " Hitchin (Herts). Sept. 11. 20 houses burned.
- " Scarborough (New England). Sept. 11. Greatly damaged by fire.
- " Amsterdam. The famous Town Hall narrowly escaped total destruction.
- " Munich (Bavaria). April 28. 200 houses burned. (1750.)
- " Gt. Milton (Oxfordshire). July 9. 16 houses burned.
- 1763 London. Jan. 6. St. James's Church; fire in the vaults; many coffins burned. *Gent. Magazine*, p. 42. (1766.)
- " London. Jan. 21. Strand, near Somerset House. Considerable fire.
- " Moxudabath (Batavia). March. Town reduced to ashes.
- " Paris. April 4. The Palais Royal greatly damaged. (1716, 1776.)
- " Vohenstraus (Bavaria). June 10. 152 houses; numerous other buildings, and the churches, schools, libraries, etc., destroyed. Only a few houses left in the town.
- " Rotherhithe (London). June 23. About 20 houses and some other buildings.
- " Essoyes (France). 237 houses burned, and only 31 left.
- " Verrens (France). 70 houses and many other buildings.
- " Offord Cluny (Huntingdonshire). July 25. The village destroyed, including several large farmeries.
- " Shadwell (London). July 10. 114 houses, some warehouses, a dock and a ship burned. (1736.)
- " Smyrna. Aug. 6. The whole of the merchants' quarter burned; damage £200,000. (1753, 1772.)

- 1763 *Shadwell* (London). Sept. 8. 30 houses, brewhouse, etc.
 " *Duna* (Russian Lithuania). 700 houses burned.
 " *Archangel* (Russia). Oct. 17. Considerable conflagration of tar. (1753, 1777.)
 " *Kehelin* (Poland). The whole city burned.
 " *Boston* (U.S.). Considerable fire. (1761, 1787.)
 1764 *Frederichstadt* (Sweden). May 1. The whole town burned.
 " *Freystadt* (Silesia). Burned, with the exception of 5 houses.
 " *Lisbon*. June 27. The Custom House, containing goods to the value of £800,000, burned; it was supposed to conceal theft. (1753, 1787.)
 " *Freyburg* (Saxony). July 10. 124 houses, besides public buildings, burned.
 " *Reval* (Russia). Great conflagration in ship-yard; many ships burned, and "some thousands of workmen perished in the flames."—*Gent. Mag.* p. 447.
 " *Calais* (France). Nov. 9. The great "Silver Lion" hotel burned.
 " *Königsberg* (Prussia). Nov. 11. Great conflagration, caused by lightning, in the King's magazines, and extended to the town, which it destroyed, with public buildings, etc. Numbers of people perished. Loss £600,000. (1761, 1769.)
 " *Freudenthal* (Silesia). Nov. 11 [? Dec. 13]. The entire town and the ramparts destroyed.
 " *London*. Nov. 24. Aldersgate. Houses, workshop, timber-yard, etc.
 " *Caillon* (France). The Carthusian Monastery burned.
 " *Harvard College* (Massachusetts). Library destroyed.
 1765 *Garton* (Mecklenburg). Reduced to ashes by an accidental fire.
 " *Belgrade* (Servia). March 19. Nearly half the city burned.
 " *Constantinople*. March 31. Upwards of 600 houses towards Pera. (1761, 1767.)
 " *Shadwell* (London). May 15. Upwards of 60 houses burned. "It is supposed that this dreadful calamity happened by the villany of some person or persons, with intent to defraud the ins. offices."—*Gent. Mag.* p. 244.
 " *Montreal* (Canada). May 26. 180 houses burned; no engines. Loss £180,000. (1768.)
 " *Nibe* (Jutland). The whole town burned, 127 houses.
 " *Rotherhithe* (London). June 1. 206 houses, besides many warehouses and other buildings. Loss £100,000. Only partially insured.
 " *Heytesbury* (Wilts). June 12. About three parts of the town destroyed, viz. 70 houses, chapel, and hospital burned. Loss beyond ins. £13,000. (1798.)
 " *London*. June 13. Great fire in the Strand.
 " *Wapping* (London). June 22. More than 30 houses, besides warehouses and other buildings.
 " *Bolbec* (Normandy). July 14. The whole town of 500 houses burned, except 10.
 " *Honiton* (Devon). Aug. 21. 140 houses, besides other buildings, destroyed. (1747, 1779.)
 " *Murbard* (Germany). Aug. 24. 153 houses burned.
 " *London*. Aug. 25. Ratcliffe Cross. A number of houses burned.
 " *London*. Sept. 10. Cheapside. Considerable fire; carelessness.
 " *Colmar* (Sweden). Oct. 18. 126 houses burned. (1755.)
 " *London*. Nov. 7. The southern portion of Bishopsgate St., with part of Leadenhall St. (near 100 houses), and the Church of St. Mary Outwich. Loss over £100,000; mostly insured. The King sent £1000 to the Lord Mayor for the sufferers.
 " *Casan* (Tartary). City burned. (1753, 1815.)
 1766 *Bridgetown* (Barbadoes). May 14. 440 houses, including the Custom House and other public buildings, and many warehouses. The rental of property destroyed £16,421. Total loss about £300,000. (1758, 1767.)
 " *Metz* (France). May 27. The extensive Barracks burned; loss 220,000 livres.
 " *Hilversum* (Holland). June 26. 203 houses and all the public buildings. (1726.)
 " *London*. August 1. Considerable fire in Clare Market and Drury Lane.
 " *Matthyssewa* (near St. Petersburg). 250 houses and cottages burned.
 " *Kettering* (Northamptonshire). Nov. 6. Considerable destruction; fireworks.
 " *Ayr* (Scotland). Dec. 3. Great fire and explosion.
 " *London*. Dec. 29. The vault under the Church of St. Clement Danes found to be on fire; many coffins consumed. (1763.)
 " *Monthison* (France). March 4. Hospital burned.
 " *Muskau* (Upper Lusatia). April 14. 136 fine houses, the Stadthouse, 2 churches, schools and other buildings; 160,000 rix dollars.
 " *Crediton* (Devon). April 23. 60 houses burned. (1743, 1769.)
 " *Upsal* (Sweden). April 30. About 100 houses and other buildings.
 1767 *Constantinople*. Jan. 7. About 80 houses and 9 ships burned. (1765, 1767.)

- 1767 *Warsaw*. March 12. The King's Palace burned.
 " *Ottery St. Mary* (Devon). Mar. 16. Greater part of town destroyed.
 " *Rotherhithe* (London). April 30. A number of houses and buildings burned.
 " *Beer* (Dorset). June 9. A number of houses burned.
 " *Shadwell* (London). July 14. 14 houses and other property.
 " *Constantinople*. Sept. 26. Some 50 large houses of the French merchants and others burned. The Grand Signor, Grand Vizier, and other principal officials of the Porte were present, and aided in staying the fire, and rewarded others for their labours. (1767, 1768.)
 " *Florence*. Dec. 19. A fire extended to a menagerie; the wild beasts escaped, and killed upwards of 100 people.
 " *Bridgetown* (Barbadoes). Dec. 27. Another most destructive fire; loss £100,000. (1766.)
 " *Kettering* (Northampton). Town burned. (1766.)
 1768 *London*. Feb. 2. Snow Hill. Considerable fire.
 " *Virey* (France). March 26. 22 houses and many buildings burned.
 " *Montreal* (Canada). April 11. 90 houses, 2 churches, etc., burned. (1765, 1803.)
 " *Crema* (Italy). April 13. Serious fire consequent upon explosion of Powder Magazine.
 " *Bracly* (near Amiens, France). April 30. Village destroyed, all but 2 houses.
 " *Dockhead* (Surrey). May 19. About 30 houses burned through the boiling of tar.
 " *Lansperg* (Germany). May 31. 255 houses burned.
 " *Shadwell* (London). June 11. A number of houses burned; 2500 tons of water were used at this fire.
 " *Jamaica*. June 12. The Royal Hospital of Greenwich burned.
 " *Riga* (Russia). June 25. 370 houses burned. (1812.)
 " *London*. July 13. Aldersgate, London House, formerly the residence of the Bishops of Lond., but now devoted to commerce, burned; £20,000.
 " *Black Forest*. July 24. The famous Abbey of St. Blaise, with church, castle, and other buildings.
 " *St. Croix* (West Indies). July. Over 1000 acres of sugar-cane, besides houses and other property, burned; damage £250,000.
 " *London*. Aug. 6. Considerable fire near Holborn Bridge. The directors of the Sun Fire paid one of the sufferers, whose pol. had lapsed a few days previously, £500.
 " *Constantinople*. Aug. 17. Palace of Grand Vizier entirely consumed. (1767, 1769.)
 " *Rome*. Aug. 30. The Library of the Vatican burned.
 " *Trautson* (Bohemia). Oct. Near 600 houses and grain stores burnt.
 " *Rochester* (Kent). Dec. Serious conflagration. (1137.)
 " *St. Kitts* (West Indies). Greatly damaged by fire.
 1769 *Crediton* (Devon). April 30. The town again nearly destroyed. (1766, 1772.)
 " *Königsberg* (Prussia). May 25. The city nearly destroyed; greater damage than in 1764. (1811.)
 " *London*. May 30. Saffron Hill. 13 houses, timber-yard, etc.
 " *Constantinople*. July 17. Near 600 houses burned, including many palaces and some mosques. (1768, 1771.)
 " *London*. July 26. Marylebone, St. James's. Many houses burned by an accidental fire.
 " *Wilton* (Wilts). Aug. 7. 25 houses and large carpet factory burned. (1770.)
 " *St. John's* (Antigua). Aug. 17. Terrible fire; 300 houses and stores burned, with much merchandize. Loss £400,000.
 " *London*. Sept. 14. Paul's Wharf, oil warehouses. The oil ran into the Thames, and burned on its surface. Loss £20,000.
 " *Venice*. Sept. Fire at Convent of the Servi; great damage.
 " *London*. Oct. 13. Star Court, Temple Bar. A number of houses burned.
 " *Rotherhithe* (London). Nov. 30. A considerable number of houses burned.
 1770 *London*. Jan. 8. Paternoster Row. Houses and large stock of books burned.
 " *Sturtley* (Huntingdonshire). March 5. The village burned.
 " *Wilton* (Wilts). Mar. 29. A number of houses, workshops, etc. (1769.)
 " *Bethlehem Hospital*. (London). Mar. Seriously burnt.
 " *Williamstead* (Bedfordshire). April 1. 26 houses burned.
 " *Eldgason* (Hanover). May 3. About 120 houses burned.
 " *Foulsham* (Norfolk). June 15. 14 houses, and many buildings burned.
 " *Portsmouth*. July 27. Dock-yard. Great destruction of stores; £149,880. A reward of £1000 was offered for the discovery of its cause. (1760, 1776.)
 " *Greenwich* (Kent). Aug. 15. Upwards of 60 houses consumed.
 " *Chumleigh* (Devon). Dec. Upwards of 30 houses burned.

- 1770 *Eddystone Lighthouse*. Upper portion burned. (1755.)
- 1771 *Harlingen* (Friesland). Jan. 18. The Admiralty and all its archives burned.
- " *Constantinople*. Feb. 14. 2500 houses burned in Galata suburb. (1769, 1772.)
- " *St. Petersburg*. May 23. Three considerable fires, consuming upwards of 1000 houses, many warehouses, and great quantities of produce. (1736, 1780.)
- " *Frauenfeld* (Switzerland). July 22. 64 houses and Catholic church burned.
- " *Portsmouth* (England). July 27. Dock-yard. Considerable fire; loss £150,000.
- " *London*. Oct. 17. Old Street Road. 13 houses and other buildings; no water.
- " *St. George* (Grenada). Dec. 27. The whole town, with the exception of a few of the principal buildings. Loss £200,000. (1775.)
- " *Edinburgh*. Great fire in Lawn Market. (1700, 1775.)
- 1772 *London*. May 8. Throgmorton Street, Austin Friars, etc., 20 houses and Drapers' Hall, etc. Loss £30,000.
- " *Credition* (Devon). May 8. 39 houses burned. (1769, 1795.)
- " *Amsterdam* (Holland). May 11. The theatre and many houses burned.
- " *London*. June 5. St. Paul's Churchyard; many houses burned.
- " *London*. June 27. Long Acre; considerable fire; attended by Mr. Sheriff Wilkes.
- " *Lapländ*. June. Great burning of the forests and forest villages.
- " *Symrna*. Aug. 21. 1500 houses, 3000 shops, 16 mosques, 12 caravanseries, 7 bagnios, 9 synagogues, and 8 public markets, etc., burned; chiefly in the Jewish quarter. (1763, 1778.)
- " *Constantinople*. Sept. 17. 200 houses burned. (1771, 1778.)
- " *Norwich* (England). Nov. 5. Considerable fire; fireworks.
- " *Falkland Islands*. Nov. 6. Serious fire on the Island, round the settlement of Egmont.
- " *London*. Nov. 10. Chandos Street, Covent Garden. A number of houses burned.
- " *Paris*. Dec. 30. The Hotel Dieu destroyed; the lives saved. (1763, 1776.)
- " *Seyda* (Prussia). 190 houses reduced to ashes.
- " *Toulouse* (France). The arsenal, and other public buildings.
- " *Oëstita* (Russia). 519 houses with storehouses, etc., burned.
- 1773 *Dresden*. Jan. 31. Great fire in porcelain factory.
- " *Aislesbury* [? Aylesbury] (Bucks). May 6. 30 houses burnt.
- " *Rheichenbach* (Saxony). June. Town entirely destroyed; caused by lightning.
- " *London*. June 6. Several houses in Cornhill.
- " *Shadwell* (London). July 14. 15 houses and other property; pitch kettle.
- " *Moscow*. July 25. Terrible conflagration; more than 2000 houses, including many of those of the nobility. A hurricane caused the flames to spread. (1753, 1812.)
- " *Ilminster* (Somerset). Aug. 2. A considerable fire.
- " *New York*. Dec. 29. The Government House burned, and but for the skilful use of the fire engines, the city stood in great danger. (1776.)
- 1774 *London*. Jan. 3. The Tower; considerable fire.
- " *Culberne* near Bath (Somerset). April 1. 54 dwellings and large amount of agricultural produce.
- " *Shrewsbury*. April 1. Terrible fire; 50 houses burned, and other buildings.
- " *Elstree* (Cambridge). April 3. Nearly destroyed.
- " *Monnestir* [? Monistrol] (France). April 19. 270 houses burned.
- " *Saxe Weimar* (Germany). May 6. Destructive fire; the Duke's palace burned. (1618.)
- " *Chatham*. May 11. 28 houses burned; a brewer near supplied small beer for the engines to play, in consequence of the scarcity of water; this, it is supposed, stopped the fire from being more serious.—*Gent. Mag.* p. 235. (1802.)
- " *London*. Nov. 13. Tabernacle Walk, Moorfields. Great conflagration.
- 1775 *Limchouse* (London). Mar. 27. 27 houses, 2 timber-yards, rope warehouse, etc.
- " *Wapping* (London). May 1. About 20 houses and biscuit bakery.
- " *Boston* (U.S.). May 17. Town dock, barracks, and large number of warehouses and other buildings; £50,000. (1761, 1787.)
- " *Charlestown* (Massachusetts). June 17. Burned by the British in the early part of the battle of Bunker's Hill.
- " *Dorchester* (Dorset). July 11. About 40 houses burned; town in great danger.
- " *Abo* (Finland). Aug. 22. Over 200 houses and 15 mills. Some lives lost. (1827.)
- " *London*. Sept. 28. Covent Garden. 7 houses burned and others damaged.
- " *Wapping* (London). Sept. 28. 20 houses burned.
- " *Rotherhithe* (London). Oct. 6. Large number of houses burned; no water for 2 hours.

- 1775 *St. George* (Grenada). Nov. 1. Almost entirely destroyed. (1771.)
 “ *Swaffham* (Norfolk). Nov. 17. About 30 houses burned.
 “ *Exeter*. Dec. 13. Serious fire on Exbridge; numbers of persons burned.
 “ *Deptford* (London). Dec. The King's Mill burned. (1761, 1841.)
 “ *St. Dizier* (France). Town nearly destroyed through carelessness of a baker.
 “ *Dorpat* (Livonia). Destroyed.
 “ *Königsberg* (Prussia). Considerable damage. (1769, 1789.)
 “ *Edinburgh*. Carpet manufactories and warehouses of Mr. Cheap. (1771, 1794.)
 “ *Blandford* (Dorset). Burned again this year. (1731.)
 “ *Philipstade* (Sweden). Town entirely consumed.
 “ *Leuczno* (Poland). Burned to ashes during its famous horse fair.
 1776 *Paris*. Jan. 8. A considerable fire at the Palace of Justice. (1772, 1777.)
 “ *London*. March 2. Considerable fire in the Savoy; printing offices, etc.
 “ *Warasdin* (Croatia). April 21. Seven-eighths of this “large and opulent”
 “ city reduced to ashes through the carelessness of a man smoking.
 “ *Bellon* (Rutland). May 29. 27 houses and many other buildings and much
 “ produce burned; hot cinders.
 “ *Askesund* (Sweden). June. The greater part of this prosperous town.
 “ *Wapping* (London). Aug. 4. 7 houses and other premises.
 “ *St. Kitts* (W. Indies). Sept. 5. The greater part of the town destroyed.
 “ (1768.)
 “ *Gefle* (Sweden). Sept. 20. Great part of this handsome town burned.
 “ *New York*. Nov. 20. A very considerable portion of the city burned by
 “ incendiaries. (1773, 1778.)
 “ *Brest* (France). Dec. 1. Hospital destroyed; some poor people and about
 “ 50 galley slaves lost their lives, and some others escaped altogether. To
 “ prevent others from doing so, they were taken into a large court-yard, and
 “ made to lie down flat; any one who lifted his head being shot.—*Ann.*
 “ *Regis.* (1784.)
 “ *Portsmouth* (England). Dec. 7. Incendiary fire; the offender hanged at the
 “ dock gates. Loss £60,000. (1770, 1861.)
 1777 *Bonn* (Rhine). Jan. 15. The Palace of the Electoral Prince of Cologne
 “ burned; many valuable works of art destroyed; loss £200,000.
 “ *Bristol*. Jan. 19. A series of fires, believed to be of incendiary origin, doing
 “ considerable damage. A reward of £1000 was offered for discovery of
 “ the offenders.—See *Ann. Regis.* 29–31. [163.]
 “ *Wheaton Aston* (Staffordshire). April 9. The village almost completely
 “ destroyed.
 “ *Llanekwilt* (Radnorshire). April 11. The village destroyed.
 “ *Auburne* (Wilts). Aug. 23. Two-thirds of village destroyed. (1760.)
 “ *Paris*. Sept. 24. Very serious conflagration; burning of booths and jewellers
 “ stalls at St. Ovid's Fair. (1776, 1784.)
 “ *Archangel* (Russia). Oct. 16. 200 houses burned. (1763, 1793.)
 “ *Genoa*. Nov. 3. The Palace of the Doge burned.
 “ *Scheen* (Norway). Dec. 6. Totally destroyed.
 “ *Cremetz* (Hungary). Totally destroyed.
 “ *New Orleans* (U.S.). Seven-eighths of the city destroyed.
 1778 *Charleston* (S. Carolina). Jan. 15. More than 250 houses, with stores,
 “ etc., were burned, and also great quantities of produce. Loss £600,000.
 “ (1700, 1796.)
 “ *New York*. Aug. 17. 300 houses destroyed by accidental fire. (1776, 1796.)
 “ *St. Just* (France). Sept. 1. The village destroyed.
 “ *Constantinople*. Sept. 4. 2000 houses burned. (1772, 1779.)
 “ *London*. Dec. 1. Pope's Head Alley. 15 “capital houses” burned, and 9
 “ others damaged. Loss considerable. Among the houses burned was
 “ Jonathan's Coffee-house, from which many Ins. projects had issued; and
 “ also several Lottery Ins. Offices.
 “ *Oxford*. Dec. 18. Queen's College partly destroyed. (1671, 1809.)
 “ *Saragossa* (Spain). Dec. Theatre burned: 400 persons perished.
 “ *Smyrna*. Fire, following earthquake. (1772, 1796.)
 1779 *Greenwich Hospital*. Jan. 2. The chapel, dining hall, and other portions
 “ destroyed. Fire engines attended from Lond.
 “ *Westminster*. Jan. 15. Parliament Coffee House, Old Palace Yard. Both
 “ Houses of Parl. were in great danger of destruction.
 “ *Honiton* (Devon). Mar. 14. About 14 houses burned, and whole town again
 “ in jeopardy; incendiary. (1765, 1790.)
 “ *Wapping* (London). Mar. 15. Upwards of 60 houses, warehouses, etc., and
 “ some ships. Many lives lost. This fire arose from a man wilfully burning
 “ his own house.
 “ *Plymouth*. July 22. The Victualling Office burned. (1795.)

- 1779 *Constantinople*. No less than 10 fires took place in this city—some of them serious—between June and Sept. (1778, 1781.)
- “ *London*. Oct. 31. The Water Works on Lond. Bridge burned, as well as hop warehouse, etc., wherein the fire originated.
- “ *Ely*. Nov. The Cathedral on fire; speedily extinguished.
- “ *France*. Castle of Angers, in which 800 prisoners were confined.
- “ *Bengal*. Great destruction of silk by fire; loss £130,000.
- 1780 *London*. Jan. 10. Great Wild Street, Lincoln's Inn. Considerable fire.
- “ *Drayton* (Berks). April 16. Upwards of 30 houses, with many other buildings.
- “ *London*. April 30. Horsleydown; about 20 houses, many warehouses, and some ships burned. Five persons consumed.
- “ *London*. June. The [Lord George] Gordon “No Popery” Riots. Many chapels and houses of Roman Catholics destroyed. Also Newgate, Clerkenwell, the King's Bench, Fleet Prison, and New Bridewell burned. As many as 36 conflagrations were visible at one time. Out of these burnings arose some important decisions in Fire Ins. See CIVIL COMMOTION; also FIRE INS. POL., CONDITIONS OF.
- “ *St. Petersburg*. Aug. 26. Great fire among flax warehouses; loss £300,000. [See later this year.] (1771, 1780.)
- “ *Gera* (Germany). Sept. 18. In this town, “so famous for its manufacture,” 744 houses were burned, with much rich merchandize. Loss “immense.”
- “ *Straubengen* (Bavaria). Sept. 18. Nearly destroyed by fire.
- “ *Salisbury*. Oct. 15. The Council-house of city burned.
- “ *St. Petersburg*. Nov. 28. Fire caused by lightning; 11,000 houses burned. [See Aug. this year.] (1780, 1782.)
- 1781 *London*. Jan. 3. Shire Lane, Temple Bar. Considerable fire.
- “ *Wapping* (London). Feb. 12. About 40 houses and other property burned.
- “ *St. Omer's* (France). Mar. 18. Many fine houses burned, nearly destroying one quarter of town. Loss considerable; no ins.
- “ *Dinan* (France). Mar. 25. Fire destroyed great number of houses.
- “ *Constantinople*. April 23. About 200 houses of the better sort burned. (1779, 1782.)
- “ *Great Harwood* (Bucks). May 28. About 60 houses burned. (1791.)
- “ *Ramsbury* (Hants). May 28. The village nearly destroyed.
- “ *Romsey* (Hants). July 4. 15 houses burned.
- “ *Veuillet* (France). July 6. 161 houses burned.
- “ *Brussels*. July 17. The Town-House burned, and many lives lost. Caused by fireworks. (1784.)
- “ *St. Mary's* (France). Aug. 2. 103 houses, and many other buildings burned. 30 persons perished in the flames.
- “ *London*. Aug. 10. Strand. 30 houses burned. The *Gent. Mag.* said on this occurrence: “The necessity of pulling down some houses to stop the progress of the flames suggests an improvement to the fire offices, of adding some bricklayers and carpenters to the watermen they employ.”
- “ *Rostadt* (Austria). Oct. 15. Reduced to ashes; lightning.
- “ *Falmouth* (Cornwall). Oct. 25. Considerable conflagration. (1792.)
- “ *St. Malo* (France). Nov. 18. 340 boats of various sizes burned in Boat-house; wilful.
- 1782 *Kingston* (Jamaica). Feb. 3. Upwards of 80 houses, and many stores burned: cause accidental. Loss £500,000.
- “ *Constantinople*. Feb. 600 houses burned. (See July and Aug.) (1781, 1782.)
- “ *Hague* (Holland). Mar. 28. The residence of the French Ambassador burned; valuable works of art destroyed.
- “ *St. Petersburg*. May 27. The general market, and many other buildings burned; site 1 mile square. (1780, 1787.)
- “ *Constantinople*. July 23. Terrible conflagration. About 9000 houses, mosques and churches burned. (1781, 1782.)
- “ *Constantinople*. Aug. 21. The following account is from *Gent. Mag.*: “At 9 P.M. a most violent fire broke out; a strong N.E. wind blowing, the flames spread with such rapidity that there was no approaching with the engines. It continued burning till the 24th at 10 A.M. The Seven Towers, the Janizary Aga's palace, most of the fine buildings and mosques, are destroyed, and full one-half of Constantinople. The fire round the large mosques was so very violent that some hundred miserable objects who had taken refuge there were destroyed. Towards the sea the flames formed a semi-circle, and reached on each side to the water's edge, when closing by degrees, the poor sufferers who were within the circle—from its vast extent unacquainted with the circumstance—were at last driven on each other, and saw nothing but the sea for a refuge; many flew to it, and those that had strength, and were fortunate enough to be where it was

- 1782 shallow, survived ; but those who could not stand 12 hours in the water, exposed to the flames on one side, and the scorching heat of the fire on the other, sank under it, and were first drowned and then burnt by being thrown upon shore. Those who were in situations that were deep were mostly drowned. Some poor wretches had fastened themselves to boards in hope of floating ; but the waves throwing them on shore, they were burned to death." (1782, 1784.)
- " *Lambourne* (Berks). Oct. 18. 17 houses and much agricultural produce burned.
- " *Warsaw*. Dec. 15. The Palace of Krasinsky burned.
- " *St. John's* (Antigua). One-third of the town burned. "Loss immense." (1769.)
- 1783 *Bencoolen* (Sumatra). April 10. Fort and Settlement burnt from fire caused by explosion.
- " *London*. April 30. Foot of London Bridge. The fire was extinguished by the aid of "2 floating engines of a new construction."
- " *Nensol* (Hungary). May 8. The greater part of the town, with the Episcopal Palace and Library, burned.
- " *Cremnitz* (Hungary). May 13. The town burned ; lightning, which took effect in 9 different places.
- " *Attendarns* (Westphalia). July 13. Out of 300 houses, 280 destroyed. (1742.)
- " *Querfurt* (Prussian Saxony). Aug. 11. 80 houses and much produce.
- " *Potton* (Bedfordshire). Aug. 14. Nearly the entire town burned. The 2 fire engines were out of repair.
- " *Wapping* (London). Sept. 24. About 40 houses burned.
- " *Beesdorf* (Prussia). Nov. 4. More than half reduced to ashes.
- " *London*. Nov. 5. Aldersgate Street. More than 50 houses burned ; loss £100,000, "the principal part of which must fall on the fire offices."
- " *Fort St. John* (Lake Champlain, U.S.). Set fire by lightning ; 600 barrels of gunpowder stored there did not ignite.
- " *Jassy* or *Yassy* (Moldavia). Part of the town ; and the castle built by Trajan. (1753, 1821.)
- 1784 *Dumfries* (Scotland). April 6. More than 200 acres of fir-plantation of 20 years' growth burned. Fired by negligence.
- " *London*. April 26. Holbourn. Considerable fire.
- " *Port-au-Prince* (St. Domingo). June 29. 150 houses in most opulent part of town ; royal magazine, with 30,000 barrels of flour and much other property ; occasioned by drunkenness. Loss £1,200,000. (1791.)
- " *London*. July 20. King Street, Bloomsbury. Number of houses burned.
- " *London*. July 27. Abchurch Lane. Considerable conflagration ; number of persons killed by fall of walls.
- " *Brest* (France). July. Serious fire in dockyard, followed by explosion. Loss £1,000,000. (1767, 1875.)
- " *Constantinople*. Aug. 5. Fire in one of the suburbs ; about 10,000 dwellings and shops burned. Several persons supposed to be concerned in the origin of this fire were put to death. (1782, 1791.)
- " *Abbotsbury* (Dorset). Sept. 7. 22 houses and many farm buildings, etc., were burned ; carelessness.
- " *Posing* (Hungary). Sept. 7. 107 houses burned. (1803.)
- " *Rokitsan* (Bohemia). Sept. 10. Destroyed. Loss £1,500,000.
- " *Weyhill Fair* (Hampshire). Oct. Fire and considerable amount of hops and produce burned.
- " *Barbadoes* (W. Indies). Oct. 16. Great fire. (1796.)
- " *Brussels*. Nov. 25. Palace of the Prince Stremburg burned. No water could be obtained for 2 hours. (1781.)
- " *Paris*. Dec. 20. Hotel de Thoulouse ; the finest known collection of medals destroyed ; and many works of fine art ; loss considerable. (1777, 1799.)
- 1785 *Truerton* (Devon). April. Between 60 and 70 houses burned. (1762, 1794.)
- " *Southwark* (London). April 7. Great fire in Horsleydown. Many buildings and warehouses were destroyed ; the turpentine, etc., escaped into the river, and being drawn into the engines, was thrown upon the fire with the water, and added greatly to the severity of the fire.
- " *Windsor Forest*. April 17. Some miles of forest burnt.
- " *Orion* (Flanders). May 14. Town entirely destroyed, except the convent.
- " *Dock Head* (London). May. Great fire. (1820.)
- " *Biggleswade* (Bedfordshire). June 16. About 120 houses, with warehouses, barns, stores, etc., consumed.
- " *London*. July 13. "This morning a fire broke out at a tallow-chandler's in Holborn ; but as it only burnt down 6 or 7 houses, in this incendiary year, it is scarcely worth recording."—*Gent. Mag.* p. 567.

- 1785 *Brienon* (France). The town entirely burned.
- 1786 *London*. Feb. 7. A fire occurred in the basement of the house occupied by the Chamberlain, which placed the Guildhall in great jeopardy.
- " *Naples*. July 31. The Monte de Pieté burned. Loss 2,000,000 crowns.
- " *Petrekoween* (Poland). Aug. 3. Upwards of 100 dwelling-houses, with corn and hay magazines, burned, with convent, part of cathedral, etc.
- " *Richmond* (Virginia). Dec. 17. 100 houses burned in principal square of city. Loss £100,000. (1811.)
- " *Tobolsk* (Asiatic Russia). Town almost destroyed.
- " *Newfoundland*. Large tract of woods burned near St. John's.
- 1787 *En route*. Jan. 12. The Manchester and London Stage Waggon. Loss £200.
- " *Lisbon*. Jan. 27. Considerable conflagration; 40 lives lost. (1764, 1794.)
- " *St. Petersburg*. Feb. 9. The grand magazines belonging to the crown and much other property burned. (1782, 1796.)
- " *Christiania* (Denmark). April 9. Considerable damage to one quarter of town.
- " *Boston* (U.S.). April 20. 100 houses burnt. (1775, 1794.)
- " *London*. June 7. Little Wild Street, Lincoln's Inn. The warehouses of Messrs. Dodsley, Longmans, etc., in which were deposited an enormous quantity of books.
- " *Ruppen* (Brandenburg). July. Upwards of 600 houses burned, 3 churches, the town hall, and the royal magazine. Loss "many millions" of crowns.
- 1788 *Chelm* (Poland). May 4. 267 dwellings and 107 stores of merchandize.
- " *Gabel* (Bohemia). May 11. Town entirely burned.
- " *Bere Regis* (Dorset). June 8. 42 houses and other buildings.
- " *Drontheim* (Norway). Dec. 3. 62 houses and 12 magazines destroyed; loss £67,500.
- " *Mittau* (Russia). Town nearly destroyed.
- 1789 *Corfu* (Venetia). Mar. 11. The arsenal burned; 72,000 lbs. of gunpowder and 600 bombshells exploded, doing incredible damage. Wall of sea blown down, and ships in harbour greatly damaged; 180 men killed.
- " *Königsberg* (Prussia). Mar. 26. The prison and adjoining properties burned. (1775, 1811.)
- " *Selby* (Yorkshire). April 15. The large wood, known as Brayton Barfe, burned.
- " *Taschen* (Silesia). May 6. The city (except church and castle) destroyed.
- " *Brandon* (Suffolk). May 14. Considerable destruction of property.
- " *Malta*. Observatory burned, "a superb building," and the observations of famous astronomers over a period of 26 years.
- " *Limoges* (France). A fire which commenced in this city was stated to have been stayed on a procession being formed, which carried in state the relics of certain saints. See 1864. (1861.)
- 1790 *Southwark* (London). April 1. Hermitage Warehouses. Loss £30,000.
- " *Honiton* (Devon). May. 37 houses burned. (1779, 1797.)
- " *Madrid*. Aug. 12. A fire which lasted 3 days, destroying one of the principal squares in the city, and about 80 houses. The *Gent. Mag.*, after stating generally that "the public prayers, many soldiers and workmen, with a small engine, and several squirts," had not been able to extinguish this fire, gave the following details:
- The fire began at midnight: forthwith the miraculous image of St. Roch was uncovered and brought in procession to the square; but the conflagration, notwithstanding the presence of the Saint, and the fervent prayers of the multitude, did not rage with less violence. The Holy Sacrament followed, but with less success; the Duke of Medina Celithen substituted the sacred image of our Saviour belonging to the Capuchins' Convent in his hotel. These successive pious efforts lasted more than 6 hours, during which time it was visible that the workmen preferred prayers to exertions.
- " *Rotherhithe* (London). Oct. 12. 20 houses burned.
- " *Carthage* (Spain). Fire in Dockyard.
- " *Carlscrona* (Sweden). 1087 houses, 2 churches, all the warehouses, and merchants' dwellings, except 2, totally destroyed.
- Note*.—In consequence of the fires this year, there was pub. by Philanthropos [George Griffin]: *Reflections occasioned by the frequency of Fires in the Metropolis; with thoughts on measures for adding to the Public Security, and remarks on the Law of Arson*. [Under FIRE PROTECTION we have attributed this pamphlet to Mr. J. Barber Beaumont. This seems to be a mistake.]
- 1791 *London*. Mar. 3. Albion Mills, Blackfriars; great destruction.
- " *Constantinople*. Between March and July of this year, it is recorded that there were 32,000 dwellings burned. (1784, 1792.)
- " *Burbage* (Wilts). April 29. Part of village burned.
- " *Manchester*. April 30. Considerable fire in Blakeney Street.
- " *London*. June 4. Goodman's Fields; patent axle factory and timber-yard. Loss £30,000. Beer was used for the engines until water could be obtained.

- 1791 *Minehead* (Somerset). July 4. 47 houses destroyed. Loss £18,000.
 " *Amsterdam* (Holland). July 6. Admiralty House and valuable stores burned.
 " *Great Harwood* (Bucks). July 9. Considerable damage by fire. (1781.)
 " *Rotherhithe* (London). Sept. 14. 60 houses and many ships consumed.
 " *Newburn* (North Carolina). Sept. 21. 160 houses burned.
 " *Worcester*. Nov. Considerable fire; damage £12,000. (1113.)
 " *London*. Dec. 13. Wellclose Square; sugar-house and other property.
 " *Port-au-Prince* (St. Domingo). Nearly burned by revolting negroes. (1784, 1820.)
 " *Cronstadt* (Russia). Greatly damaged by fire. (1870.)
 " *Newport* (Salop). 17 dwellings, and many other buildings, with produce, etc. (1749.)
 1792 *London*. Jan. 14. Pantheon, Oxford Street, burned. Loss £60,000. Insured £15,000—£10,000 in *Westminster* Fire, £5000 in *Phoenix*.
 " *Sheffield* (Yorks). Feb. 9. Cotton factory burned. Loss £45,000.
 " *Dublin*. Feb. 27. The Parliament House considerably damaged. Although in imminent danger of the roof falling in, the House did not adjourn until a proper motion had been put and carried in the affirmative. (1816.)
 " *Manchester*. Mar. 15. Cotton factory, valued at £100,000, burned.
 " *Seville* (Spain). May 7. Custom House destroyed.
 " *Grenada*. May 16. The Carenage considerably damaged.
 " *Barton-Stacy* (Hants). May. 27 houses, and other buildings, burned.
 " *Falmouth* (Cornwall). Aug. 21. 42 houses and theatre destroyed. (1781, 1862.)
 " *Preston* (Somerset). Dec. 14 houses burned, and many more damaged.
 " *Constantinople*. 7000 houses destroyed. (1791, 1795.)
 1793 *Archangel* (Russia). June 26. 3000 buildings, including cathedral, destroyed. "Loss immense." (1771, 1811.)
 " *Stanton St. John's* (Oxford). June 27. Considerable part of village destroyed.
 " *London*. Dec. 2. Hawley's Wharf, nr. the Hermitage; considerable property.
 " *London*. Dec. 5. Paternoster Row. Great fire. Monk's *Agricultural Dictionary*, partly printed, part MS., burned.
 " *London*. Dec. 13. Duck Lane, Wardour Street. 13 houses.
 1794 *Gottenburg* (Sweden). Feb. 4. Fire destroyed 120 houses. (1802.)
 " *Knightsbridge* (London). Feb. 11. Floorcloth factory. £20,000.
 " *Copenhagen*. March 1. The Royal Palace of Christianbourg burned. This was one of the most commodious and sumptuously furnished palaces in Europe. Library preserved. Loss estimated at 2 millions sterling! (1728, 1795.)
 " *Corunna* (Spain). March 11. The arsenal burned; 50 persons killed, and many wounded.
 " *Tiverton* (Devon). June 30. Over 200 houses destroyed. (1785.)
 " *Wapping* (London) and *Ratcliffe Highway*. July 21. There were burned 630 houses, and an East India warehouse, containing £40,000 worth of sugar. Also 35 bags of saltpetre, and much other merchandize. This was regarded as the largest fire since that of 1666. Damage £1,000,000. The Government lent tents for the sufferers to reside in. There was pub.: *A Sermon preached on occasion of the Dreadful Fire at Ratcliffe Highway, July 23, 1794*. 8vo. With a preface, being a brief historical account of the fire.
 " *Nassington* (Northamptonshire). July 31. 13 dwelling-houses, and many other buildings, burned.
 " *Boston* (U.S.). July. Another fire. Damage £200,000. (1787, 1797.)
 " *London*. Aug. 17. Large fire on Surrey side of Westminster Bridge; Astley's Theatre and 19 houses burned. (1803.)
 " *Wincanton* (Somerset). Sept. 16. Number of houses burned. Caused by lime.
 " *London*. Oct. 18. Thames Street, warehouse and much produce.
 " *London*. Oct. 20. Dean Street, Soho. Tallow-chandler's; great destruction.
 " *Edinburgh*. Nov. 23. Bell's famous brewery. Great damage. (1775, 1795.)
 " *Lisbon*. Nov. Royal Palace. (1787, 1816.)
 1795 *Liverpool*. Jan. 18. The greater part of the Town Hall and Exchange burned. "The rapidity of the fire was occasioned by the mode practised when the Exchange of that town was built, of coating each timber with turpentine or resin, in order to preserve it, which, when caught by the fire, proceeded with such rapidity round the interior of the edifice as to baffle any exertion to get it under until the whole was gutted."—*Gent. Mag.* (1762, 1796.)
 " *Manchester*. Jan. 20. Great fire at spinning factory in Oak Street. (1804.)
 " *Crediton*. Feb. 23. Considerable fire; 18 houses destroyed. (1772.)
 " *Boyne*, Man-of-War, 98 guns. April 30. This famous ship was burned off Spithead. [FIRES ON BOARD SHIP.]

- 1795 *Romford* (Essex). May 27. New barracks burned.
- " *Copenhagen*. June 6. 943 houses burned, with church and large naval stores, ship timber, etc.; loss very considerable. This fire exhausted the funds of the State Fire Bureau. (1794, 1843.) [COPENHAGEN.]
- " *Montego Bay* (W. Indies). June 12. 110 of the best houses destroyed, and large quantities of produce. Loss £400,000. Accidental.
- " *Stockholm*. June. Nearly destroyed. (1759, 1799.)
- " *Potsdam* (Prussia). Sept. 4. The magnificent Cathedral of St. Nicholas burned.
- " *Daventry* (Northamptonshire). Oct. 22. Considerable fire.
- " *Plymouth* (Devon). Dec. 16. Considerable destruction of property. Loss £30,000. Very little ins. (1779, 1804.)
- " *Edinburgh*. Considerable fire. (1794, 1811.)
- " *Constantinople*. Many thousands of houses destroyed. In Dallaway's *Travels in the Levant*, pub. 1797, there is contained the following statement, which, if true, may account for the number of fires in this city:
- The Sultan is then [on the occasion of a fire] summoned 3 times, and when the conflagration has lasted one hour, he is forced to attend in person, and to bring mules with him laden with piastres, which he distributes with his own hands to the firemen, who are very inactive before his arrival. . . . Fires are extinguished by pulling down the adjoining houses, for the engines are very small, and carried on the shoulders of two men. The perfect resignation with which the Musulman sees his house consumed by the flames has been often and justly remarked by others; he exclaims *Allah Karim!* that is, "God is merciful!" without apparent emotion. . . . As to the women, they have not the praise of such philosophy. They assemble in a group near the Sultan, and unmercifully load him with the bitterest revilings, particularizing his own crimes, and the errors of his gov., and charging him with the cause of their present calamity. . . . As this is the only privileged time of conveying the voice of the people to his ears, and as women in Turkey say anything with impunity, it is presumed that many of the fires are not accidental. (1792, 1799.)
- 1796 *Frampton* (Dorset). April 20. Nearly destroyed.
- " *Smyrna*. April. 4000 shops (Ottoman merchants), 2 large mosques, 2 baths, and magazines of provisions burned. Damage 10,000,000 crowns. (1778, 1811.)
- " *Barbadoes* (W. Indies). May. Great fire on this Island. Another, December this year. Immense damage. (1784.)
- " *Cheshunt* (Herts). June 13. Watts and Parson's oil-mill.
- " *Charleston* (U.S.). June 13. Great part of town destroyed. Value of buildings £150,000; prob. nearly the same for contents. (1778, 1838.)
- " *St. Petersburg*. June. A large magazine and many ships [100?] burned. (1782, 1818.)
- " *East Whitley* (Yorks). Sept. 16. 16 houses and buildings burned.
- " *Liverpool*. Sept. 17. Warehouses in Cheapside. Great destruction of produce. (1795, 1797.)
- " *Leeds* (Yorks). Oct. 6. Cotton-mills at Hunslet burned; £100,000.
- " *London*. Nov. 1. Shadwell. 20 houses burned.
- " *Baltimore* (Maryland). Dec. 4. Nearly destroyed by fire.
- " *New York*. Dec. 8. 70 houses burned. Incendiary fire. (1778, 1800.)
- " *Klagenfurt* (Illyria). Very destructive fire. (1723.)
- " *West Point* (New York). Military School destroyed.
- 1797 *Liverpool*. Feb. Great fire in Old Dock. (1796, 1799.)
- " *London*. March 19. Haydon Square and Minorities. Great destruction of property.
- " *London*. May 14. Borough. Considerable conflagration.
- " *Scutari* (Turkey). Aug. 12. About 3000 houses entirely destroyed.
- " *Honiton* (Devon). Aug. 24. About 40 houses. Loss £20,000. (1790.)
- " *Savannah* (S. Carolina). Nov. 26. 229 dwellings, in addition to other buildings, burned. (1758.)
- " *Shadwell* (London). Dec. 12. The buildings of the water-works burned down. 8000 houses left without supply of water.
- " *Boston* (U.S.). Dec. Considerable fire. (1794, 1802.)
- 1798 *Carlisle*. Jan. 30. Extensive cotton factory destroyed.
- " *Great Chishall* (Essex). Feb. 22. 100 houses burned or damaged. Value £10,000.
- " *Tipperary* (Ireland). April 12. About 120 dwellings, with many stores and much produce, burned. Sparks from chimney.
- " *Blisworth* (Northampton). May 28. 50 dwelling-houses, and many other buildings burned.
- " *London*. July 6. St. Giles's. Number of houses burned.
- " *Ordrup* (near Copenhagen). Sept. Nearly entire village burned.
- " *Wilmington* (N. Carolina). Oct. 30. Nearly destroyed.
- " *Heytesbury* (Wilts). Dec. 27. Considerable fire. (1765.)
- 1799 *Paris*. Jan. 9. A considerable part of the buildings in the Palais Royal burned. (1784, 1802.)

- 1799 *London*. March 16. Hermitage Stairs. 31 houses burned.
 " *Peru*. March. 13,000 houses burned. No details.
 " *Liverpool*. May 23. Okell's sugar-house. (1797, 1802.)
 " *London*. July 13. King's Bench Prison partly destroyed. (1780.)
 " *Waterford* (Ireland). Dec. 12. The great sugar-house of Messrs. Perrier's burned. (1815.)
 " *Whitechapel* (London). Dec. 24. Sugar-house of Messrs. Lucas & Martin.
 " *Philadelphia*. Dec. 28. Great damage; fire originated in theatre. (1839.)
 " *Constantinople*. The suburb of Pera had 1300 houses, including many magnificent buildings, destroyed. (1795, 1816.)
 " *Manila* (Philippine Islands). Vast storehouses entirely destroyed. (1833.)
 " *Stockholm*. Fire at a sugar-house in suburbs of the city. The difficulties attending the extinguishment of fires in Northern Europe during the winter months are very forcibly illustrated by the incidents of this fire, as described by Mr. Acerbi in his *Travels through Sweden*, etc.:
- The accident being announced by the discharge of cannon, all the fire engines were immediately hurried to the aid of the owners. The severity of that winter was so great, that there was not a single spot near, where the water was not frozen to the depth of a yard from the surface. It was necessary to break the ice with hatchets and hammers, and to draw the water from the well. Immediately on filling the casks they were obliged to carry them off with all possible speed, lest the water should be congealed, as in fact about a third part of it was by the time it was brought to the place where it was wanted. In order to prevent it as much as possible from freezing, they constantly kept stirring it about with a stick; but even this operation had only a partial effect. At last, by the united power of many engines, which launched forth a great mass of water, the fire was got under. . . . The water thrown up to the top of the house by the engines, and flowing back on the walls, staircases, and through the windows, was stopped in its downward course by the mighty power of the frost. After the fire was extinguished, the engines continued for some time to play, and the water they discharged was frozen almost the instant it came in contact with the walls, already covered with ice. . . . The whole building was incrustated from top to bottom with a thick coat of ice; the doors and windows were closed up, and in order to gain admission, it was necessary with hammers and hatchets to open a passage; they were obliged to cut through the ice another staircase, for the purpose of ascending to the upper stories. . . .
- Steam fire engines, by their rapidity of action, have overcome some of these difficulties. (1795, 1802.)
- 1800 *Pimlico* (London). Jan. 21. Bramah's Engine and Patent Locks Works burned.
 " *London*. Feb. 11. Lower Thames Street. Brandy and sugar warehouses. Loss £300,000.
 " *Gaslar* (Lower Saxony). April. Fire at the mines here, which penetrated to a depth of 750 feet.
 " *Vauxhall Gardens* (Lambeth). June 29. Much damaged by fire.
 " *Dover* (England). July 30. Foot Barracks burned; carelessness of plumber. (1808.)
 " *Carenton* (Germany). July. 100 houses burned.
 " *Ballassa* (Hungary). Aug. 7. 568 houses, a church, and other public buildings, burned.
 " *Colmar* (Sweden). Aug. 150 houses and many persons burned. (1765.)
 " *Radnor Forest* (Wales). Aug. Destroyed by fire.
 " *Neuburg* (Upper Palatinate). Aug. Wholly destroyed.
 " *Wapping* (London). Oct. 6. 30 houses, some warehouses, etc. Damage £80,000.
 " *London*. Oct. 31. Aldgate. Considerable fire; several firemen burned.
 " *Gibraltar*. Nov. Royal Battery destroyed by fire.
 " *New York*. Considerable fire. Loss £20,000. (1796, 1811.)
- 1801 *Rodrigville* (Galicia). May 5. Nearly consumed.
 " *London*. June 10. Wood Street. Extensive sugar-house burned.
 " *Cracow* (Galicia). Oct. Nearly destroyed. (1850.)
 " *Broody* (Galicia). About 1500 houses destroyed.
- 1802 *Liverpool*. Jan. 19. Suffered considerably from fire. (1799, 1805.)
 " *Boston* (U.S.). Feb. Fire caused by "40 daring incendiaries." (1797, 1824.)
 " *Woolwich* (England). May 20. The storehouses of the Arsenal destroyed. Loss £200,000. (1805.)
 " *Bedford*. May 25. 60 houses burned.
 " *Chatham* (Kent). June 30. Great conflagration. (1774, 1820.)
 " *Thurles* (Ireland). Aug. 29. About 50 dwellings, and many other buildings, burned.
 " *London*. Sept. 1. Leadenhall St. Considerable fire, opposite East India House.
 " *Liverpool*. Sept. 14. Tremendous conflagration in Goree buildings and warehouses fronting St. George's Docks. Loss estimated at £1,000,000; and about two-thirds of loss was insured. (1802, 1805.)
 " *London*. Sept. 27. Store Street, Tottenham Court Road. Great destruction of property. Loss £40,000; insured.

- 1802 *Paris*. Oct. 21. The Hall of the Cornmarket burned. (1799, 1810.)
 " *Stockholm*. Nov. 15. Considerable conflagration. (1799, 1822.)
 " *Portsmouth* (New Hampshire). Dec. 102 buildings destroyed. (1813.)
 " *Gottenburg* (Sweden). Dec. 22. A fourth part of city destroyed, including Cathedral, Palace, Post Office, and other public buildings. (1794, 1813.)
 1803 *London*. Feb. 2. Falcon Court, Fleet Street. The printing house of Mr. S. Hamilton, and other property. Loss £80,000. Ins. small.
 " *Madras*. Feb. 14. More than 1000 houses destroyed.
 " *Bombay*. Feb. 27. Nearly destroyed by fire, and many lives lost. (1845.)
 " *Ghergong* (Assam). Feb. 28. Great fire, succeeding earthquake, and followed by explosion; "incredible damage," and many lives lost.
 " *London*. Mar. 10. Rosemary Lane; cooperage and clothes exchange burned.
 " *Sheering* (Essex). April 27. Considerable fire.
 " *Montreal* (Canada). May 6. 30 houses, churches, prisons, etc.; £30,000. (1768, 1849.)
 " *Westminster Abbey*. July 9. Fire in roof of tower did serious damage to woodwork of choir. Loss £5000. Plumbers. (1829.)
 " *Culross* (Perthshire). July 25. Forest on fire.
 " *Chumleigh* (Devon). Aug. 19. Town nearly burned. Loss over £25,000.
 " *Southwark* (London). Sept. 1. 40 houses and Astley's Theatre. (1794, 1841.)
 " *London* (Fifth Street, Soho). Dec. 2. Great destruction of property, fire lasting several days.
 " *Ringwood* (Hants). Dec. 14. Considerable fire.
 " *Foring* (Hungary). 283 houses destroyed. (1784.)
 " *Balow* (Russia). 458 houses burned.
 " *Canton* (China). The palace, harem, and 200 adjoining houses burned, occasioned by lightning. The astrologers had predicted this fire. (1820.)
 1804 *Durham*. Jan. 7. Mr. Salven's cotton manufactory and buildings; £20,000.
 " *London*. Feb. 25. Charing Cross. Considerable fire.
 " *Manchester*. Mar. 1. Fire at Garret Mill. Loss £20,000. (1795, 1813.)
 " *Shadwell* (London). April 16. Rope-walk, warehouses and produce; £20,000.
 " *Grays* (Essex). June 23. Range of grain warehouses burned; smoking.
 " *London*. June 26. Bishopsgate. Considerable fire, originating at tallow-chandler's.
 " *London*. Aug. 9. Thames Street; 3 warehouses in Ducks-foot Lane.
 " *Dorchester*. Oct. 2. Barracks burned; soldier falling asleep smoking.
 " *Chelmsford* (Essex). Oct. 22. Large inn, in which 120 Hanoverian troops were quartered, burned; 12 soldiers smothered.
 " *Plymouth* (England). Dec. 18. Great conflagration in market-place; many houses burned. (1795, 1812.)
 1805 *Wapping* (London). Jan. 13. Considerable fire, originating at a cooperage, and consuming it and many houses, etc.
 " *Brampton* (Hunts). April 13. Considerable number of houses burned.
 " *Bromley-by-Bow* (Middlesex). April 21. Extensive flour-mills and grain stores. Loss £50,000.
 " *Woolwich* (England). June 30. Great fire in storehouses of Royal Arsenal. (1802, 1813.)
 " *London*. Aug. 12. Royal Circus, St. George's Fields. Great destruction of property. Loss £25,000; ins. had run out.
 " *Whitechapel* (London). Aug. 12. A number of houses burned.
 " *Liverpool*. Sept. 21. Great fire in Lower Sparling Street; damage £30,000. (1802, 1818.)
 " *Wansford* (Northampton). Oct. 20. Extensive paper-mills burned.
 " *St. Thomas* (West Indies). Nov. 22. Terrible conflagration; some 900 warehouses and stores destroyed; damage estimated at £6,000,000 sterling. [This island contained the storehouses for the produce of many of the other West India Islands.] (1825.)
 " *Verdun* (France). Serious fire, which some English sailors, who were detained prisoners here, helped to extinguish. They were liberated and supplied with money from the private purse of Napoleon I.
 " *Neisse* (Prussia). The library burned during the siege.
 1806 *Hungerford* (Berks). May 17. Considerable fire.
 " *Langford* (? Beds). May 24. 2 breweries and about 50 dwelling-houses.
 " *Shadwell* (London). Aug. 7. Sugar-house in Union Street burned; another in Conduit Street. Great loss.
 " *Westminster*. Sept. 1. Distillery burned. Loss £60,000.
 " *London*. Dec. 14. Aldersgate Street. St. Paul's Alley, Hare Court, burned.
 " *Acomb* (Northumberland). Dec. 25. 9 dwellings and much produce burned.
 1807 *Westminster*. Jan. 19. St. James's Palace. Damage slight through timely aid. (1809.)

- 1807 *Chudleigh* (Devon). May 22. Town nearly destroyed; fire engine burned.
 " *Huish* (Somerset). June 8. Village entirely destroyed.
 " *Lambeth* (London). Aug. 10. The premises of the Waterworks Co. destroyed.
 " *Hoxton* (London). Aug. 10. Considerable fire in Pittfield Street.
 " *London*. Oct. 3. Mr. Whitbread's Brewery, Chiswell Street. The fire extinguished itself; for burning the bearings of a large vat containing 2071 barrels of beer, this mass of liquid being suddenly released, extinguished the fire.
- 1808 *London*. Feb. 8. The printing office of Messrs. Nichols & Son, Red Lion Passage, Fleet Street, burned; suspected cause, snuff of candle thrown down carelessly. It was in this office that the *Gentleman's Mag.* had long been printed; and in the "preface" to vol. iii. of index of that valuable periodical is the following reference to the fire:
 . . . A calamitous event (at which the present writer still trembles whilst recording it) in a few short hours demolished the accumulated stock of half a century. His extensive printing offices and warehouses, with their valuable contents, were rapidly consumed; and, amongst other articles of still more intrinsic literary as well as pecuniary interest, were the unsold numbers of the *Gent. Mag.* from 1783 to 1807, with the exception of a very few copies, which were in the publisher's warehouse; and so fiercely did the fire rage that many hundred copper-plates (and amongst them those of the *Mag.*) were totally spoiled, and some actually melted.
 Messrs. Nichols were ins. for £12,000; but that sum fell very far short of the loss.
- " *Spanish Town* (Trinidad). Mar. 24. About 1500 houses with enormous stores of merchandize burned; 10,000 people without homes. Estimated loss £1,500,000.
 " *Dover* (England). May. Sustained considerable injury; the Ordnance storehouse burned. Loss £30,000. (1800, 1853.)
 " *Haddenham* (Isle of Ely). May. Number of dwellings and buildings burned.
 " *London*. Sept. 20. Covent Garden. Commencing in Theatre, and extending into Bow Street, where many houses were burned. Loss immense; insurance heavy, £60,000 on Theatre. The Beef-Steak Club burned out, and its stock of wines (valued at £1500) destroyed.
 " *Holy Places* (Palestine). Oct. 12. Fire broke out in chapel of Armenians; nearly the whole of the sacred edifices destroyed. (1244.)
- 1809 *London*. Jan. 22. St. James's Palace partly destroyed. (1807.)
 " *London*. Feb. 24. Drury Lane Theatre (built of timber) burned. The incidents of this fire formed the theme of one of the *Rejected Addresses*. [FIRE BRIGADES.]
 " *Oxford*. March 3. Christ Church Hall; £12,000. (1778, 1820.)
 " *London*. May 14. Billingsgate; great fire; damage £70,000.
 " *London*. July 9. Conduit Street. Mr. Windham, of political fame, while aiding in saving Mr. North's valuable library, received an injury which led to his death.
 " *Westminster Palace*. South-eastern wing burned. (1512.)
- 1810 *London*. Jan. 1. Whitefriars Wharf, Messrs. Pococke & Buckley, and other property. Loss £30,000.
 " *Ummirapoora* (Burmah). March. "The City of the Immortals" burned.
 " *Paris*. July 1. Building erected for a ball given by Prince Schwarzenburgh caught fire; many persons burned. (1802, 1820.)
 " *London*. July 13. Little Titchfield Street. Mr. Reeve's floorcloth manufactory, 7 houses, and Mr. Huntingdon's chapel.
 " *London*. July 20. Took's Court; premises of Mr. Paris, printer, and other houses.
- 1811 *Bristol*. March 22. Considerable fire at Castle & Co.'s distillery.
 " *Rohensfield* (Hanover). March 26. 153 houses burned.
 " *Warkworth* (near Banbury). April 12. Village almost entirely burned.
 " *Merriot* (near Crewkerne). April 16. 24 dwellings burned; man shooting rat.
 " *New York*. May 19. Nearly 100 buildings destroyed. (1800, 1816.)
 " *Newburyport* (Massachusetts). May 31. 250 buildings burnt. Public subscription.
 " *Smyrna*. June 10. 300 houses, 6000 shops, 100 "fireproof" warehouses, 20 khans, 5 mosques, 12 chapels, 7 konahs, and merchandize. (1796, 1841.)
 " *Königsberg* (Prussia). June 14. 144 houses, 134 warehouses, and great quantities of merchandize. Loss about 1 million rix-dollars. (1789.)
 " *London*. June 19. St. Mary Axe; most destructive fire; many houses burned.
 " *Bautzen* (Lusatia). July 23. 125 houses burned; drought.
 " *Tyrol* (Switzerland). July 26. Several forests took fire, by which 64 villages and hamlets, and 10,000 head of cattle, were destroyed.
 " *Saalfeldt* (Germany). July 29. Out of 121 houses, 108 were burned.
 " *Archangel* (Russia). Aug. 12. Considerable loss of property. (1793.)

- 1811 *Presnitz* (Bohemia). Aug. 14. Out of 368 houses, 314 burned.
- " *Prussia*. Aug. A considerable number of forests burned.
- " *Cambridge* (England). Oct. Fire at Emanuel College; damage £20,000. (1852.)
- " *Edinburgh*. Nov. 10. Considerable fire in Parliament Square. (1795, 1817.)
- " *Cassel* (Germany). Nov. 25. Palace partly destroyed. The King escaped.
- " *Sargans* (Switzerland). Dec. 9. This town of 400 houses reduced to ruins.
- " *Richmond* (Virginia). Dec. 26. A fire at theatre caused the death of 72 persons. (1786, 1861.)
- " *Presburg* (Hungary). The Royal Palace burned.
- Note.—During this year intense heat prevailed in Europe.
- 1812 *Serampore* (Bengal). Mar. 11. Fire at English mission house; much paper, type, etc., burned. Loss £12,000.
- " *Plymouth* (England). June 8. Fire at rope-works in dockyard. Loss £12,000. (1804, 1836.)
- " *Gamblingay* (Cambridgeshire). July 9. Village destroyed.
- " *London*. Aug. 25. South Audley Street. Tremendous conflagration; nearly 400 tons of tallow said to have been on the premises. Many houses burned and damaged.
- " *Moscow*. Sept. 14. This is one of the great fires of history. The following summary of its incidents is the best we have met with: The French entered the city Sept. 14, Napoleon proposing to make it his winter quarters. On that very day several fires broke out, but little attention was paid to them by the invading army until the next two days, when they had acquired great headway. On the 17th a high wind arose, and the flames spread rapidly in every direction; by the 18th the whole city appeared a sea of flame, and by the evening of the 20th nine-tenths of it was reduced to ashes. The total number of buildings destroyed is stated at between 13,000 and 15,000. The Russians at the time, in order to cast odium on the French, attributed this conflagration to the orders of Napoleon. It is now, however, generally acknowledged that the fires were the work of the Russians themselves, and that they were kindled by the orders of the Governor, Rostoptchin, acting beyond all doubt under the sanction of the Emperor Alexander, without which it is hardly conceivable that the Governor would have ventured on such a step. The object was to deprive the French army of shelter from the winter. Ample precautions had been taken to insure the entire destruction of the city. Inflammable materials were placed in deserted mansions in every quarter, and the torch was applied simultaneously all over the city. In burning the French out of their proposed winter quarters, no provision had been made for the safety of the inhabitants, who were driven to seek shelter in the surrounding woods; and it is affirmed that more than 20,000 sick and wounded perished in the flames. The direct loss to the French is put down at 40,000; and beyond this it in the end involved the retreat in the dead of winter, and the almost complete annihilation of the great French army. This act, which the Russians at the time repudiated, is now considered by them as their highest glory, the greatest example in history of national self-sacrifice for the destruction of an invader. The palace of the Kremlin was burned.
- For further details, see *Ann. Regis.* for this year, p. 174. (1773.)
- " *Dalkeith* (Scotland). Sept. 30. Extensive conflagration.
- " *London*. Oct. 5. Camomile Street and Bishopsgate Street; considerable destruction of property.
- " *London*. Oct. 17. Leadenhall Street to Billiter Street; many houses.
- " *Riga* (Russia). Part of town destroyed: granite column erected in commemoration. (1768, 1864.)
- 1813 *Manchester*. Mar. 30. Very considerable fire; Green & Co., Aspinwall & Co. Damage £50,000. (1804, 1816.)
- " *London*. April 4. Commercial Hall, Skinner Street. Loss considerable.
- " *Poole* (Dorset). April 20. The Custom House and other buildings; great damage; carelessness.
- " *Woolwich*. July 8. Great fire in rope-yard of Arsenal. (1805, 1824.)
- " *London*. July 15. A rectifying still, containing 2804 gallons of spirit, burst at Messrs. Langdale & Co.'s distillery, High Holborn.
- " *London*. Aug. 12. Oxford Street; Messrs. Gillow's cabinet factory; great destruction.
- " *Salford* (Manchester). Oct. 31. Great fire at Bank mill. Loss £30,000.
- " *Southwark* (London). Dec. King Street, timber-yard of Messrs. Jones, and 15 houses.
- " *Portsmouth* (New Hampshire). Dec. 397 buildings destroyed. (1802)

- 1813 *Gottenburg*. Again nearly destroyed. (1802.)
- 1814 *London*. Feb. 12. Custom House; warehouses, range of buildings, and public records destroyed. Loss immense. (1718.)
- " *London*. May 14. Billingsgate. Considerable fire.
- " *Southwark* (London). Aug. 24. Bankside. Oil and mustard mills, and remains of Winchester Palace destroyed, with much other property.
- " *Shadwell* (London). Oct. 10. High Street; 20 houses burned.
- " *Limehouse* (London). Nov. 11. Several warehouses and 16 dwellings destroyed.
- " *Asch* (Germany). The Catholic church, the mansions of the 3 Counts of Zedwitz, the Post Office, and about 400 private dwellings burned.
- " *Rangoon* (Burmah). Upwards of 6000 houses destroyed. This town has been the scene of many serious fires, of which we cannot obtain authentic details.
- 1815 *London*. May 23. Aldersgate Street; great fire at tallow-melter's, Shaftesbury Place.
- " *London*. May 24. Dorset Street, Blackfriars, Gasworks burned.
- " *Petersburg* (Virginia). July. Destroyed.
- " *Port Royal* (Jamaica). July 13. Great part of the town again burned. (1750.)
- " *London*. July 14. Minorities; about 20 houses burned.
- " *Quebec*. Sept. 3. Great fire; property of value of £260,000 burned; part belonged to Government. (1759, 1834.)
- " *Yeoville* (Somerset). Sept. 21. 17 dwellings burned.
- " *London*. Oct. 26. Royal Mint, Tower Hill; eastern and southern wings damaged.
- " *Waterford* (Ireland). Oct. 26. The interior of the Cathedral entirely destroyed.
- " *Kentish Town* (London). Nov. 23. Mr. Slack's sugar-mill, Grove Place, Kentish Town, burned; also the owner; and his will being also consumed, the case came before the Prerogative Court, Doctors' Commons, 1816—*Slack and others by their Guardian v. Slack*. The contents of the will being proved, it was upheld, although the document itself was non-existent.
- " *London*. Nov. 28. Extensive fire in Brownlow Street, Holborn.
- " *St. John's* (Newfoundland). Suffered considerably. (1816.)
- " *Casan* (Tartary). Burned. (1765.)
- " *Teneriffe* (Canary Islands). Large convent burned; many lives lost.
- Note*.—A considerable number of fires in the agricultural districts occurred this year; attributed to the more general introduction of threshing machines.
- 1816 *Morton Hampstead* (Devon). Jan. 13. 15 houses destroyed. (1757.)
- " *London*. Feb. 11. Berkeley Square; the mansion of Mr. C. Boon, with his valuable library. [MANSIONS, DESTRUCTION OF, BY FIRE.]
- " *St. John's* (Newfoundland). Feb. 12. Terrible conflagration; 130 houses burned. (1815, 1817.)
- " *Beverlee* (Notts). Mar. 19. 14 houses and other property burned.
- " *Dublin*. Mar. 25. Considerable fire on St. Stephen's Green. (1792, 1833.)
- " *London*. April 23. Stock Exchange Coffee House, and several adjoining houses.
- " *Fontaine-Notre-Dame* (France). April 25. About 20 houses burned.
- " *Manuden* (Essex). April 25. Malt kilns and agricultural produce burned.
- " *Thorverton* (Devonshire). June 22. 17 houses and number of buildings burned.
- " *Stoborough* (near Wareham). July. 15 houses burned.
- " *Brere* (Dorset). July. Several fires occurring at same time threatened destruction of village.
- " *Constantinople*. Aug. 15. Some 1200 houses and 3000 shops and magazines burned. The Sultan was present all night; but the efforts to stop the fire were not energetic. (1799, 1818.)
- " *Lisbon*. Oct. 5. "The beautiful church of St. Julian." (1794, 1836.) [CHURCHES.]
- " *London*. Oct. 23. Bow Churchyard; great destruction of Irish linen and other dry goods. Loss £40,000. The Lord Mayor was in attendance to organize measures to stop fire.
- " *New York*. Dec. 4. Destructive fire. (1811, 1835.)
- " *Manchester*. Dec. 14. The Albion mills burned; loss £25,000. (1813, 1828.)
- " *Wapping* (London). Dec. 16. Warehouses of Messrs. Viner & Co. and several others burned.
- " *Poplar* (London). Dec. 20. Number of houses destroyed. Mrs. Cock, aged 80, perished.

- 1816 *Port Louis* (Mauritius). Ravaged by fire.
Note.—A number of forest fires occurred in the U.S.; in the Katshill Mountains, and in Massachusetts, etc.
- 1817 *Port Louis* (Mauritius). Feb. 1. The greater part of the town, including all the public buildings, burned; "20,000 people have been reduced to want and beggary." (1816.)
- " *Birmingham*. May 15. Water Street mills destroyed; £200,000.
- " *London*. May 23. Fleet Street; the extensive premises of Mr. Mist, printer and newspaper proprietor. Out of this fire arose the action *Mist v. Eagle Fire* (1818), when the plaintiff obtained a verdict.
- " *St. John's* (Newfoundland). June 18. Fire broke out during heavy gale; 15 houses burned. (See Nov.)
- " *Neustadt* (Holstein). Sept. 28. Burned, with the exception of 5 houses; 1400 inhabitants left homeless. Commenced in a distillery.
- " *St. John's* (Newfoundland). Nov. 7. Another fire; about 135 dwelling-houses, with many stores, etc.; and on 21 Nov. still another, so that a considerable portion of the town was now in ruins. A grand jury summoned to investigate the causes of these several fires found them to have been solely through accident. (1816, 1819.)
- " *Edinburgh*. Nov. 29. Fire at the University. Engine of *Royal Exchange* Ins. Corp. stationed at Leith rendered great service. (1811, 1824.)
- " *Darlington* (Durham). Worsted mill burned; damage £35,000.
- 1818 *Liverpool*. Jan. 31. Suffolk Street. Loss £40,000. (1805, 1821.)
- " *London*. Mar. 1. Strand. Number of houses destroyed; 3 persons perished; loss very considerable; delay in getting water.
- " *St. Petersburg*. March 28. The Panopticon or Government workshops. (1796, 1820.)
- " *Gran* (Hungary). April 13. Partly destroyed.
- " *London*. July. Newton Street, High Holborn; Messrs. Spencer's and 5 other warehouses.
- " *London*. Aug. Ratcliffe Highway; 15 houses.
- " *Constantinople*. Aug. 13. Some thousands of houses burned, with several churches and mosques. The Sultan and his high officers used great efforts to secure the extinction of the fire; its origin political. (1816, 1826.)
- " *Salzburg* (Austria). Partly destroyed.
- 1819 *Chester*. March. Destruction of large corn-mills; loss £30,000.
- " *Azmooz* (Switzerland). March 16. 113 houses burned; the church and about 25 houses escaped.
- " *London*. June 23. Bolt Court, Fleet Street. The premises of Messrs. Bensley & Son, printers, and adjoining properties. One of the houses burned was formerly the residence of Dr. Johnson.
- " *St. John's* (Newfoundland). July 18. Great number of houses burned; 170 families homeless. (1817, 1826.)
- " *London*. Aug. 20. St. Mary Axe; Leathersellers' Hall, and several houses.
- " *Whitechapel* (London). Nov. Sugar refinery of Messrs. Severn, King & Co. burned; damage £80,000. The property was insured in the *Imperial*. That office disputed its liability on the ground of misdescription of premises, etc. The plts. obtained a verdict of £7181 2s. 6d. on one of the pol., leaving the others still in dispute, which were prob. arranged amicably.
- There was pub. in 1820: *Report of the Trial of the Action brought by Messrs. Severn, King, & Co. against the Imperial Ins. Co. before Lord Chief Justice Dallas and a Special Jury, in the Court of Common Pleas, at Guildhall, on the 11, 12, and 13 Days of April, 1820.* Taken in shorthand by Mr. W. B. Gurney. [IMPERIAL INS. CO.]
- " *Nassau* (Providence Island). Place destroyed.
- 1820 *Oxford*. Jan. 15. Fire at Magdalen Hall; damage limited. (1809.)
- " *London*. Jan. 17. Strand. Norfolk Street, several houses; attributed to gas.
- " *London*. Jan. 23. Thames Street; great destruction. Loss £200,000.
- " *London*. Jan. 27. Lower Deptford Road. China Hall and silk mills.
- " *Canton* (China). March 3. 15,000 houses burned. (1803, 1822.)
- " *Chatham* (Kent). March 3. Great destruction of property. Loss £100,000; insured £70,000; *Hope* office largely interested. London fire engines sent for. Out of this fire arose the following remarkable case:
- Maidstone Assizes (March, 1821), *Coven v. Baker*. This was an action of trespass for pulling down and demolishing, without leave or licence, 2 leasehold houses of the plt., situate in the parish of Chatham, under the following circumstances: A terrible fire was raging, and there was a fear that it would extend considerably. The deft., who was directing operations at the fire, it was alleged, gave orders for the pulling down the houses in question. The houses were insured in the *Eagle Fire* for £400; but the

- 1820 office refused to pay because it was not a loss within the terms of the pol. In consequence of this refusal, the owner brought this personal action. The plaintiff alleged that when the order was given to pull down the houses, the flames were abated, and the wind in a contrary direction. The evidence for the deft. was that the commandant of the garrison gave the order for pulling down, although upon the advice of deft.; and that the pulling down was necessary in view of safety of property and life. The jury found a verdict for the amount claimed, £320, and costs. [DESTRUCTION OF BUILDINGS TO STOP FIRE.] [FIRE EXTINGUISHMENT, COST OF.] (1802, 1845.)
- " *Rotherhithe* (London). March 16. 60 houses and several ships destroyed. Loss £80,000.
- " *London*. March 23. Gracechurch Street; 12 houses.
- " *St. Petersburg*. May 24. Imperial Palace on Zankajeselo. (1818, 1836.)
- " *New Orleans* (U.S.). June 9. The Naval Arsenal burned. Loss £20,000.
- " *Savannah* (Georgia). June 10. 463 buildings, and other property to the value of nearly £800,000, destroyed. (1852.)
- " *Dock Head* (London). July 12. Extensive granaries; caused by unslacked lime. (1785.)
- " *Forest of Apennines*. July. Great fire raged for some days on the frontiers of Naples.
- " *Paris*. July 31. Fire at the Wine Depot in the Bourg Bercy. In the absence of water to supply the engines, an attempt was made to extinguish the flames with wine—of which a lake of 50 ft. square and more than a foot deep was formed; but the fire continued to rage [as well it might, being supplied by alcohol], and great destruction of property resulted. Damage estimated at £560,000. The lost wine belonged to 610 different proprietors. (1810, 1858.)
- " *Port-au-Prince* (West Indies). Aug. 15. Tremendous conflagration; loss estimated at £600,000. Arose from children playing with fireworks. (1791, 1865.)
- " *Southwick* (Brighton). Sept. 6. Large brewery; uninsured.
- " *London*. Nov. 9. Drury Lane; timber-yard and 10 houses burned.
- " *Bath*. Dec. 21. The Lower Assembly Rooms; loss considerable; ins. £13,400. (1836.)
- 1821 *Paramaribo* (Capital of Dutch Guayana). Jan. 21. Terrible fire; 1000 buildings, including 392 dwellings, reduced to ashes. Loss very considerable.
- " *Mile End* (London). Jan. 22. Messrs. Smith & Co.'s sugar refinery, etc.; loss £200,000.
- " *Liverpool*. Feb. 7. The Caxton Printing Office—"the largest periodical printing office in the world"—entirely burned, including upwards of 3,000,000 of fo., 4to., and 8vo. Nos. Loss very considerable. Insured for £36,000. (1818, 1823.)
- " *London*. Feb. 20. Tooley Street, Mr. Ald. Humphrey and Mr. Wigram's wharves, and other property destroyed. Loss £60,000.
- " *Mile End* (London). April 3. Messrs. Burnell & Grice's sugar factory (next to Hanbury's brewery), burned; loss £50,000.
- " *London*. Sept. 9. Gracechurch Street; large warehouses, meeting-house, etc.; 4 lives lost.
- " *Bow* (London). Nov. 3. Old Gravel Lane: Mr. Geo. Hoppe's warehouse and others destroyed.
- " *Jassy* or *Yassy* (Moldavia). Extensive conflagration. (1783, 1827.)
- 1822 *Janina*, or *Joannina* (Albania). Jan. Almost entirely destroyed by order of Ali Pasha, the "Lion of Janina."
- " *London*. March 2. Paternoster Row; Mr. Bagster's and other premises burned. (1861.)
- " *Stockholm*. June 12. Great conflagration in the Blasiholmen quarter, and coal, tar and other magazines, and some shipping. Loss prob. £100,000 to merchants, and of great extent to the Crown. (1802.)
- " *Nordkoping* (Sweden). June. Great destruction; 400 houses, 2 churches, etc.
- " *Whitstable* (Kent). June 30. 46 buildings, including 9 dwellings, burned. Very little ins.
- " *Smithfield* (London). Aug. 14. Great fire; Messrs. Reed & Co., plate-glass makers. Loss £100,000.
- " *Rouen* (France). Sept. 15. Cathedral (timber-built) burned, from lightning.
- " *London*. Sept. 16. Bermondsey Road; floorcloth manufactory of Rolls & Goulston destroyed, with 20 surrounding houses.
- " *Ghent* (Belgium). Oct. 11. Cathedral of St. Bavon burned.
- " *Amsterdam*. Oct. Lutheran Church, 6 dwellings, and 9 warehouses burned.
- " *Venice*. Oct. 17. The superb church of St. Peter burned. Caused by lightning.

- 1822 *Canton* (China). Nov. 2. East India Co. and European factories burned. According to the official return, 13,070 houses were burned, and 30,000 chests of tea; 500 Chinese burned. Loss to East India Co. £1,000,000. (1820, 1835.)
- " *London*. Dec. 21. Long's Hotel, Bond Street, entirely destroyed.
- " *Uleaborg* (Finland). Suffered severely from fire.
- 1823 *London*. Jan. 26. Watling Street; fire occurred under suspicious circumstances. Out of it arose the case of *Thurtell v. Beaumont*; and afterwards The King, on the prosecution of the County Fire Office, *v. Thomas Thurtell* and others. For the dramatic incidents disclosed, see COUNTY FIRE.
- " *London*. June 6. Red Lion Street; 15 houses burned.
- " *London*. June 24. Bedford Street; considerable fire in Featherstone Buildings.
- " *Rome*. July 15. The Church of St. Paul burned. This fine and ancient building contained many of the pillars and other fragments taken from the celebrated tomb of Hadrian. (A.D. 191.)
- " *Sarepta* (on the Wolga). Aug. 9. The greater part of the town destroyed.
- " *Wapping* (London). Oct. Great conflagration. Loss £100,000.
- " *Liverpool*. Oct. 22. Messrs. Booth's warehouses. 240,000 bushels of corn burned, valued at £60,000. Total loss £150,000. Well insured. (1821, 1826.)
- 1824 *London*. Mar. 18. City Road Basin. Messrs. Pickford's extensive wharves; loss immense. The firm believed to be fully insured; but many of the merchants not covered. (1857.)
- " *Woolwich* (Kent). March 24. 12 houses and some other buildings burned. (1813.)
- " *Cairo* (Egypt). Mar. 29. The palace of Mehmet Ali burned, and magazines and stores; followed by explosion; 4000 lives lost.
- " *Edinburgh*. June 24. Disastrous fire. (1817, 1824.)
- " *Boston* (U.S.). July 7. Considerable fire. (1802, 1848.)
- " *London*. Aug. The printing houses of Mr. Moyes and Mr. Wilson, in Greville St., burned. Many valuable works destroyed.
- " *Edinburgh*. Nov. 15. Great destruction of property in High Street. (1824.)
- " *Edinburgh*. Nov. 16. Another serious fire in Parliament Close; 300 families rendered houseless. (1824, 1835.)
- " *London*. Nov. 24. Fleet Street. Great fire, which opened out the view to St. Bride's Church.
- Note*.—In the *Cabinet of Foreign Voyages and Travels*, pub. this year, is given a very interesting account of "The Eternal Fire on the banks of the Caspian Sea." From the naphtha arising from it the Crown of Russia derives a considerable ann. revenue.
- 1825 *St. Thomas* (West Indies). Feb. 12. About 500 houses, mostly of the smaller sort, burned. Loss estimated at £100,000. (1805, 1831.)
- " *London*. May 23. St. Mary Axe; considerable fire; loss £30,000.
- " *Honiton Clyst* (near Exeter). June 20. Over 30 dwellings burned.
- " *London*. June 21. Tichfield Street, Mortimer Street, Wells Street, Great Portland Street, Timber-yard, St. Margaret's Chapel, and Mr. Varley's Picture Gallery. Loss £200,000.
- " *Gravendeel* (Holland). July 18. About 100 houses burned.
- " *Christchurch* (Hants). July 20. Over 50 houses burned.
- " *Obicht* (Switzerland). Oct. 7. Greater part of the village burned.
- " *New Brunswick*. Oct. A district of more than 5500 square miles in extent was enveloped in a forest fire. Many small towns were destroyed. Part of the capital of the province (Fredericton) was burned. Relief Committees were formed throughout Canada and the U.S., and large sums collected and distributed to the sufferers. Great Brit. sent nearly £5000.
- 1826 *Lambeth* (London). Jan. 5. The famous Shot Tower of Messrs. Walker & Parker burned.
- " *London*. April 11. Wellclose Square and Royalty Theatre destroyed; great damage. Gas on stage.
- " *London*. April 11. Old South House, Old Broad Street, burned down.
- " *St. John's* (Newfoundland). June 9. Town almost entirely destroyed. (1819, 1846.)
- " *New Jersey State* (U.S.). July. Fires in the woods extending over 45,000 acres; 8000 cords of prepared wood burned.
- " *Constantinople*. Aug. 31. Some 6000 houses destroyed in the best part of the city; also the palaces of the Nedschib Effendi, agent of the Pacha of Egypt; the two great magazines of the Vizer Khan and the Eltzi Khan, and the palace of the Armenian Patriarch, etc. (1818, 1831.)
- " *Over* (Cambridgeshire). Sept. Great fire of agricultural produce, farm buildings and cottages; loss £27,000.

- 1826 *Yorkshire*. Fires on the Moors; great damage.
 " *Liverpool*. Nov. 23. Tabley Street. (1823, 1829.)
 " *London*. Nov. Oxford Street; Messrs. Wright and Aspinall; £50,000.
 " *Dublin*. Dec. 24. Stores of H.M.'s stationer; great loss.
 " *Eimbeck or Einbeck* (Hanover). Once a place of considerable importance, partially destroyed; 170 dwellings and some other buildings burned.
 1827 *Sheerness*. July 31. 50 houses and much property destroyed. Loss £50,000. (1830.)
 " *Jassy* (Capital of Moldavia). Aug. Great part of the city burned, including the palace of the Hospodar, and those of the Boyars Roznowan, Ghika, Palladi, Kalimachi, etc., 15 churches, and the Catholic Convent. The streets being floored with wood also took fire. In all, about 800 houses were consumed; 50 lives lost. (1821.)
 " *Abo* (Capital of Finland). Sept. 4. About 780 buildings, the University, the Cathedral, the Library of 40,000 vols., the Cabinet of Medals, the Town Hall, Courts of Justice, and Custom House; only 30 houses escaped. The *General Ins. Co.* of Stockholm stood upon a risk of 300,000 dollars. (1775.)
 " *London*. Nov. 10. Queen Street, Thames Street. Several houses and warehouses burned.
 Note.—This year there was discovered near Weymouth (Dorset) what was designated as the "Burning Cliff," the earth or substance forming the cliff being in a state of slow combustion.
 1828 *Havana* (Cuba). Feb. 10. 350 houses destroyed. (1873.)
 " *Manchester*. May 17. The Soho Foundry, with machines, models, etc. Loss £20,000. (1816, 1829.)
 " *London*. June 14. Red Lion Street; 15 houses; several lives lost.
 " *Hereford College*. July 28. The south range burned.
 " *George Town* (Maryland). Dec. 29. Nearly destroyed.
 1829 *York*. Feb. 2. The Minster set on fire by Jonathan Martin, a lunatic; damage estimated at £60,000. There was pub.: *Some Account of the Destructive Fire in the Choir and 'Chapelle of our Lady' in York Cathedral*. Large quarto. (1463, 1840.)
 " *London*. Feb. 3 West India warehouses; loss £300,000.
 " *London*. May 11. Bell Yard, Fleet Street; considerable fire.
 " *Chelsea*. May 17. Messrs. Downing & Son's floorcloth manufactory; loss £30,000. Uninsured.
 " *Leigh-upon-Mendip* (Somerset). May 25. 15 houses and many other buildings burned.
 " *London*. May 29. Queen's Bazaar, Oxford Street, burned down. There was being shown here at the time of destruction a transparency, "The Destruction of York Minster by Fire."
 " *Westminster Abbey*. July 9. Extinguished without serious damage. (1803.)
 " *Manchester*. Oct. 12. Warehouses of the Co. of Merchants; great destruction of property. (1828, 1838.)
 " *Liverpool*. Nov. 16. Liver Street burned. (1826, 1830.)
 1830 *Sheerness*. Jan. 4. 54 houses burned; loss £30,000, mostly insured. (1827.)
 " *Newcastle-upon-Tyne*. Jan. 28. Destructive fire; loss £25,000. (1846.)
 " *London*. Feb. 5. Argyle Rooms destroyed. Insured £15,000. It was at this fire the first of the modern Steam Fire Engines was used with such marked success. [FIRE ENGINES, STEAM.]
 " *Liverpool*. March 21. Great sugar-house, Harrington Street. £30,000. (1829, 1831.)
 " *London*. Aug. 11. Bartholomew Close; Messrs. Houghton's estab. and other premises, including those of Mr. Adlard, printer. Damage £200,000. The stock of the *Encyclopædia Londinensis* on Mr. Adlard's premises was valued at £12,000.
 " *Gloucester* (Massachusetts). Sept. 16. Large fire; loss £20,000, insured about £5000.
 Note.—The great feature of this year was the number of fires in the agricultural districts of England, resulting from the "Swing" combination. [FIRE INS. PREMIUMS.]
 1831 *London*. April 6. Doctors' Commons. Number of houses burned; loss very considerable.
 " *Constantinople*. Aug. 2. Severe conflagration in Pera and other quarters simultaneously; 18,000 houses burned. The English Ambassador's residence burned. (1826, 1833.)

The following account of this fire was written by an eye-witness:

A gentleman looking into the English Palace Garden at Pera . . . at about 10 o'clock in the morning saw some dry grass smoking, and on pointing it out to the people, they ran to extinguish it with the greatest anxiety, and then informed him that there was a fire

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somewhere, which had set the grass smoking by the adhesion of a red-hot nail. He immediately went in search of the fire, and found a few houses in flames at a place called Sakiz Aghatz, in a deep valley between the great burying-ground and the village of S. Demetri. The situation of the place was so remote, and the fire at the time so trifling, that he thought there could be no possible danger to the town; but he was struck by the distance to which the fire may be communicated. The Palace Garden, in which the grass was on fire, stood on the summit of a hill, more than half a mile from the burning houses. The wind which prevailed was that which periodically returns at that time of the year. It comes very strong from the N.E., and continues for three weeks or a month drying up every substance capable of combustion, and rendering it highly inflammable, and then spreading the flames the moment they begin. The space between the fire and the palace was a steep hill, which presented a face of wooden houses, almost like a pile of dry timber. Against this the flame was driven, and it ascended with incredible activity. Several persons who stood on the brow of the hill over the fire, seeing it travelling fast towards Pera, where they lived, hastened home; but on their return, the streets were so obstructed by crowds hurrying away with their effects, that they were delayed, and they found the fire had travelled as fast as they did, and was actually at the walls of the English Palace, and entering the Pera street as soon as themselves. It was generally supposed, that the English Palace, insulated in an open area, could not be reached by the fire; but in a short time the flames spread all round; the houses on all sides of the garden wall were in a blaze, and the whole area of the larger garden was canopied by sheets of flame and smoke. Several persons had brought their furniture and effects thither, as to a place of security; but the air became so heated, and loaded with fiery particles, that everything laid there began to burn. The trees now took fire, and the wind, which had never ceased, suddenly increased to a furious gale, and drove the whole column of flame against the deserted building. The noise it made was like the roaring of a vast furnace, and it seemed to envelop the whole palace. In a very few minutes the palace was observed to smoke violently; flames then burst out of the windows, and in about 20 minutes the roof fell in, and nothing remained of this fine edifice and all it contained but scorched walls and smoking ashes. Thence the fire took the direction of Pera, consuming everything before it with irresistible and incredible force; *the fireproof stone houses opposed no more effective obstacle to it than the wooden sheds.* The residences of the French, Dutch, Sardinian, Russian, and Prussian Ambassadors, and the merchants' houses were consumed; and in about 6 hours all the palaces of the European Missions were destroyed, except the Austrian and Swedish, which were out of the direct line of the fire. The latter had been burnt before, and little remained of it but the gate-house; the former had belonged to the Venetian Embassy: it had stood almost since the time of the Crusades, and *the flames seemed to turn aside from it as if they knew it to be incombustible.* The fire continued to extend through different directions, particularly down Casim Pasha, till 8 or 9 in the evening, when the wind subsided, and its progress was stopped,—after extending over an area of about 3 miles in circumference, and consuming all that part of the peninsula that former fires had spared. The next morning presented a dismal spectacle. The people driven from their houses, had no place of retreat but the burying-ground: there they were seen in the sands, stretched on the earth, with no covering but the sky, and no bed but the graves. The Sultan immediately directed that barracks and other large edifices should be appropriated for their shelter, and he distributed among them 100,000 piastres.

A return was made of the number of persons burned out; they amounted to 80,000!

- " Nottingham. Oct. 10. The castle was burned during the Reform Riots.
- " Bristol. Oct. 29. Series of fires by the rioters. The Custom House, Bishop's Palace, 3 prisons, great number of warehouses, and many dwellings burned. (1841.)
- " Liverpool. Dec. 22. Fenwick Street; many large warehouses; destruction immense. (1830, 1833.)
- " St. Thomas (West Indies). Dec. From 600 to 700 houses, many warehouses, and much produce: £500,000. (1825.)
- " Fayetteville (U.S.). Nearly destroyed; 2000 persons homeless.

Note.—The great feature of this year was the "Reform Riots," which not only led to the fires in Nottingham and Bristol, but to many others of lesser note in Worcester, Coventry, Derby, etc.

1832

Glasgow. Jan. 14. Queen Street. Warehouses and other property to the value of more than £150,000. Insured in several offices. Cause of fire never ascertained. (1749, 1849.)

Regarding this fire, Mr. F. G. Smith, in his *Practical Remarks*, etc., pub. this year, says:

The cause of the late disastrous fire in Queen Street, Glasgow, . . . by which property to the extent of more than £100,000 was destroyed, and so many offices severely suffered, was never ascertained. The subsequent burning of 2 large cotton mills worth more than £50,000 in the same city, also remains a mystery, as well as many other considerable fires in the neighbourhood within the last year.

In add. to these actual burnings, many attempts have been made during the past year to burn property in which ins. cos. have been concerned to a great extent, but which happily have been frustrated.

He proceeds to set out the circumstances.

- " London. May 22. Messrs. Barclay & Perkins' brewery; great damage done. Steam fire engine used. See FIRE EXTINGUISHMENT under this date. Beer vats containing 2000 barrels were poured out to supply the engines. [FIRE EXTINGUISHMENT, 1832.]
- " North Tawton (Devon). June 29. About 30 houses burned. (1834.)
- " Harbour Grace (Newfoundland). Aug. 19. Considerable portion of town burned.
- " London. Nov. 27. Long Acre. Coach manufactory of Messrs. Turrell & Co., and 14 houses burned.

- 1833 *Liverpool*. Jan. 14. Valuable property destroyed; Lancelot's Hey, etc. Loss £198,000. (1831, 1834.)
- " *Manila* (Indian Archipelago). March 26. 10,000 huts destroyed; 30,000 persons rendered homeless; and 50 lives lost. (1799, 1864.)
- " *Tain* (Ross-shire). April 25. Jail burned; prisoners allowed to escape.
- " *Liverpool*. May 24. Gibraltar Row. (1833.)
- " *London*. June 1. Wood's Family Hotel, Panton Square, entirely consumed.
- " *Lympston* (Devon). June 19. 58 dwellings burned.
- " *Dublin*. Aug. 10. Custom House; 700 puncheons of spirits; 300 casks of tallow, and nearly 5000 hogsheads of sugar. Loss £200,000. Only partly insured. (1816, 1837.)
- " *Constantinople*. Oct. About 2000 houses, 1000 shops, and 111 mills burned. Order was maintained in an unusual degree. (1831, 1836.)
- " *Shaw* (near Oldham). Nov. 10. Great destruction of factory buildings.
- " *Frankenhausen* (Germany). This old town destroyed by fire.
- Note.—A large number of incendiary fires were prevalent in Eng. this year. Their individual results are too small to be enumerated.
- 1834 *Liverpool*. Jan. 1. Considerable destruction: estimated damage £300,000. (1833, 1834.)
- " *Liverpool*. Jan. 24. Dublin Cos. Warehouses. (1834.)
- " *Quebec*. Jan. 25. The Castle of St. Louis, the residence of the Gov. Gen. of the Canadas, burned; loss £30,000. (1815, 1845.)
- " *London*. Jan. Mile End. Great conflagration. Loss £200,000.
- " *Oldham*. June 28. Extensive cotton-mills burned.
- " *Tula* (Russia). July 11. This handsome provincial capital burned; 9 churches, 670 private residences, the markets, the celebrated manufactory of arms, the tallow magazines, etc., were all involved. The Emperor took energetic measures for relief, sending 100,000 roubles for immediate necessities, and starting personally to superintend.
- " *North Tawton* (Devon). July 15. From 60 to 70 houses burned. (1832.)
- " *Liverpool*. Aug. 16. Most destructive fire near Salthouse Dock. (1834.)
- " *Liverpool*. Oct. 10. Another great fire; Lancelot's Hey; £30,000. (1834, 1837.)
- " **Houses of Parliament** (London). Oct. 16. This fire in many respects assumes an historic interest. It was first seen about 6:30 in the evening, and gained very rapidly, so that in a comparatively few hours the Houses of Lords and Commons, the Painted Chamber, the Royal Gallery, the Library, the House of the Speaker, St. Stephen's Chapel, and many of the other parts of the buildings, were entirely destroyed. The State Drawing Room, under the House of Commons, the Levee Rooms, the Cloisters, and other parts of the building not actually destroyed, were very much damaged. Westminster Hall escaped practically uninjured. The fire engines had been taken in here comparatively early in the fire, and were made very useful. The Houses were not in Session. Many of the records were burned; but these were of less consequence, as they had mostly been printed. The warrant for the execution of Charles I. was stated to be burned.
- On the 22nd Oct. the Privy Council was assembled for the purpose of investigating the origin of the fire. They made their Report, dated "At the Council Chamber, Whitehall, Nov. 8," wherein they set forth that in consequence of an order from the Treasury directing the Board of Works to destroy the "wooden tallies and foils which remained in the tally room of the Exchequer," and which tallies, etc., were understood to be useless, Mr. Milne, one of the Commissioners of Woods and Forests, appointed Mr. Phipps, the Assistant Surveyor of Works and Buildings, to meet him, and they discussed the matter, and it was determined to burn the tallies in the Exchequer Yard, or some other convenient place, as they knew the building of the Houses was only wood and plaster. The matter was discussed with the Clerk of the Works and some of the lower officials, and finally the furnaces of the House of Lords were agreed upon. Two men were detailed for the purpose. The whole of the "tally-sticks"—about a cart-load, it was stated—were removed for the purpose, and at 6:30 on the morning of the 16th the burning commenced. By 11 o'clock the house-keeper of the Lords (Mrs. Wright) perceived unusual smoke, and would have stopped the work, but she had no authority to do so. During the day other symptoms arose; but no steps were taken; and at 6:30 p.m.—just 12 hours after the burning commenced—the conflagration arose. They conclude that the fire was "wholly attributable to carelessness and negligence."
- The labours of the Committee were rendered more onerous from the

1834

circumstance of a statement having been made to them on the authority of a respectable mercantile man that he had heard of the fact of the Houses of Parl. being on fire, at Dudley during the same evening. This the Committee traced out with a great deal of care, and came to the conclusion that it must have been a mistake; it probably being the following evening, by which time the news could have arrived.

Out of this fire arose the case of *Viscount Canterbury v. The Attorney-General*, which was a petition of right, whereof the point at issue was the liability of the Crown to make good the loss sustained by the Speaker of the House of Commons in the destruction of his property in his official residence—the fire being the result of negligence.

The Houses of Parl. had been rebuilt, and the circumstances of their burning passed out of immediate recollection, when some of the incidents associated therewith were revived before the Select Parl. Committee on "Fires in the Metropolis," which sat in 1862. We present an outline of what occurred.

Sir Richard Mayne, then Chief of the Metropolitan Police, being under examination, stated that he believed, if there had been a better organized force, the Houses of Parliament, which were burnt in 1834, might have been saved; and he went on to say:

I may add that Westminster Hall, I believe, was saved mainly by the exertions of Lord Hill and myself. I was with him. There was no fire brigade then [the Lond. Fire Engine Estab. had come into force on 1st Jan. 1831]; but we endeavoured to get the engines to play at the only point which appeared to us to be of importance, as the mass of the fire was so great that it was obviously impossible to save the Houses of Parl. In a short time the only object was evidently to save Westminster Hall. I was with Lord Hill, and we walked about and examined the different points, and it was the opinion of both of us that it would be very desirable to concentrate all the engines at that particular point. I think it was connecting the Speaker's house, or some part of the building, with Westminster Hall. The fire engine men refused to do what we asked them to do, and at last Lord Hill said, "If you will concur, I will send some of the Guards (a good many of the Guards were there) on to the roof, and we will cut off the communication." That was done. A large number of the Guards were sent up, who divided the roof, and the connexion with Westminster Hall, and I believe that it was by that arrangement and that step that Westminster Hall was saved.—Q. 156.

Mr. John Drummond, one of the Managers of the *Sun* Fire, and then Chairman of the Lond. Fire Engine Estab., was asked by the Chairman of the same Committee: (1891) Have the Fire Brigade ever been called upon to assist in putting out fires in any of the public buildings in Lond.? —(Answer) Yes; we had 12 engines and 64 men engaged at the fire at the Houses of Parl., and notwithstanding what was said here the other day by a gentleman, I believe that the preservation of Westminster Hall was entirely owing to Mr. Braidwood and 8 or 9 men who were there—two of whom were disabled for life by it. (1870.)

- " *Greusson* (Germany). Oct. 16. 260 dwellings and many other buildings burned.
- " *Opalare* (? Poland). Oct. This town, consisting of over 200 houses, and belonging to the Count Alex. Poloski, was burned.
- " *Rotherhithe* (London). Nov. 6. Inn and about 12 houses burned.
- " *Forest Fires* in Russia and North Germany of great extent.
- " *Liegnitz* or *Lignitz* (Silesia). The old Castle, the residence of the Dukes of Liegnitz, nearly destroyed.
- " *Wernar Neustadt* (Vienna). Of 500 dwellings, all were burned but 5; the public buildings seriously damaged. About 10,000 persons reduced to want. Subs. were opened in Eng.
- " *Galicia*. The towns of *Letsisk*, *Sienjawka*, *Debica*, *Rimanow* and *Menurou*, were burned, but we have no details. (See 1801.)

Note.—This was a season of unusual drought.

- 1835 *Edinburgh*. Jan. 24. Considerable fire on North Bridge. (1824, 1856.)
- " *Peterborough*. Feb. 21. 65 houses burned.
- " *London*. March 2. Silver Street, Golden Square. Extensive conflagration.
- " *London*. Aug. 3. In Charter House Square and Street; many houses burned.
- " *Barnet* (Herts). Aug. 23. Tallow-melter's and many of the principal houses in the place burned.
- " *Epping Forest*. Aug. Considerable fire; ultimately stopped by trench dug by sappers and miners.
- " *New York*. Sept. Considerable fire; church and many stores and dwellings; also several newspaper offices. (1816, 1835.)
- " *Canton* (China). Nov. 22. Considerable fire; 1500 houses burned. (1822, 1856.)
- " *Hatfield* (Herts). Nov. 22. Left wing of Old Palace (where Queen Elizabeth had been kept prisoner before her accession) burned to the ground. The Dowager Marchioness of Salisbury perished in the flames.

1835

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Millbank (London). Fire at Penitentiary; serious.

New York. Dec. 16. Great fire. Destruction of 674 houses, warehouses, etc., including Merchants' Exchange. Damage between £3,000,000 and £4,000,000. The extent of this fire was attributable to narrow streets, a gale of wind, and the intense cold, which froze up the engines and rendered them useless. The Croton Water Works were commenced soon afterwards.

The *N.Y. Evening Post* of 16 Dec. 1875, gave the following retrospective details regarding this fire—the first of the serious fires which have afflicted the U.S.:

Forty years ago to-day this city was visited by what for a long time was known as "the great fire." Compared with the conflagrations which since then have ravaged Boston and Chicago, it may appear small, but the country was then much less able to bear a heavy loss than at present. The amount of damage occasioned by the Chicago fire was not far from the sum of the federal disbursements of the year in which it occurred. The same remark may be made of the great fire of Dec. 16, 1835. N.Y. then contained only 300,000 inhabitants, and Chicago was but a village. We have grown during the interval to a degree which prevents a parallel in the matter of statistics.

The fire broke out at 9 o'clock in the evening of the 16th in Comstock's dry goods shop, in Merchants (now Hanover) Street, and raged for nearly 24 hours. The weather was intensely cold with a high wind. Like the great fire in Chicago it was preceded by a smaller but still serious fire which had worn out many of the members of the fire department. The number of buildings, principally warehouses, destroyed was 674, and the loss was 22,000,000 dols. more than the entire ins., which, though only 8,000,000 dols. [here the total loss is made £6,000,000 stg.], ruined several cos. Five daily journals were burned out. The space cleared was equal to 40 acres. In Front Street alone 80 business houses were consumed. The destruction of the Merchants' Exchange involved that of Hughes's statue of Hamilton, which graced the Rotunda. Although inferior as a work of art, it was a fine reproduction of the features, and therefore was considered a serious loss.

It is curious to observe the fact that after a lapse of 40 years the outlines of the burned district are still distinguishable. Looking at Front Street, above Wall, one may see the antique style of the warehouses, whereas all below are of modern architecture. The same remark will apply to Pearl and Water Streets. The fire was checked at Coenties Slip, and there one may find still remaining the ancient warehouses which mark its limits.

The great fire resulted in the most remarkable improvement in architecture the city had hitherto witnessed. This consisted in greater elevation, in better masonry, and in the use of granite, which then was a new feature.

Great as may have been the loss to the holders of lands and houses by reason of their inability to collect pol. of ins., the great rise in value fully compensated them. The vast plot cleared by the fire doubled at once in price, and men sold their vacant lots at an advance which covered the price of the former buildings. One of the grandest monuments of this improvement is the Custom House, which was built as a "Merchants' Exchange" in place of the one which had been destroyed. Another great improvement due to this fire was made in Exchange Place. It was built up in modern style, and has become a great financial centre. The damage, however, was severely felt by merchants, who were ill prepared for such a heavy blow. It is said that the destruction of this vast amount of wealth was felt to a considerable degree in the panic of 1836. Perhaps the immense destruction of property occasioned by the Chicago and Boston fires has a very large share in the bus. troubles of the present day. (1816, 1836.)

1836

St. Petersburg. Feb. 17. Fire in Lahaman's Theatrical Booth; 126 people perished; the Emperor personally headed the Fire Brigade. (1820, 1837.)

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New York. Feb. 18. Methodist book store, printing office, etc. Loss about £50,000; ins. about £5000. General subs. amongst Methodist body. (1835, 1839.)

"

Plymouth. March 12. Fire in the Citadel; several houses destroyed. (1812, 1863.)

"

London. March 26. Western Exchange, Burlington Arcade, and 24 houses and shops consumed. Mr. Yeates's picture gallery alone involved an estimated loss of £35,000.

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Bath. June 30. Considerable conflagration at the Roman Catholic College, Prior Park. (1820.)

"

Lisbon. Aug. 14. The Treasury, Rocio Square, entirely burned. (1816, 1863.)

"

Southwark. Aug. 30. Fenning's Wharf, London Bridge, and warehouses in Duke Street, with other property. Loss £400,000.

"

Constantinople. Sept. The whole quarter of the city called Sultan Buyazid; many magazines and houses. Loss £500,000. (1833, 1848.)

"

Washington (U.S.). Dec. 15. General Post Office and Patent Offices burned. (1851.)

1837

London. March 20. New Street Square, Fleet Street, Mr. Spottiswoode, King's Printer; warehouse containing printed sheets of *Lardner's Cyclopædia*, Lord Byron's works, etc., burned. Loss £20,000.

"

Liverpool. March 30. The new Mechanical Inst. in Mount Street. Building insured in *Liverpool Fire* for £6000. (1834, 1838.)

"

Dublin. April 24. The Royal Arcade, Royal Hotel, Boyle & Co.'s Banking House, and old Post Office, with many houses, burned. (1833, 1857.)

"

Brentford (Middlesex). May 10. The extensive distillery of Messrs. Booth.

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Surat (Hindustan). April. Three-fourths of city (consisting of some 5000 or 6000 houses) burned and 500 lives lost. The fire commenced in the house of a Parsee, "but whether from accident or design has not been ascertained."

- 1837 *London*. June 22. Deptford Road. The "Manor Mills." Great destruction of property.
- " *London*. Aug. 5. A vault in Shoreditch Church, containing 11 coffins, on fire.
- " *Trosachs* (Scotland). Aug. 25. The ideal residence of the "Lady of the Lake," or Ellen's Bower on Ellen's Island, Loch Katerine, burned through carelessness.
- " *London*. Sept. 4. Basinghall Street. Considerable fire.
- " *Southampton*. Nov. 7. Great fire at oil and colour manufacturers' (Messrs. King, Witt & Co.); 21 lives lost.
- " *London*. Dec. 28. Davies Wharf; 5000 barrels of turpentine, and 800 tons of oil, etc., destroyed. The heat from this fire was so great that the cast-iron water-pipe outside one of the warehouses was melted. The fire originated with the workmen employed in the turpentine warehouse with naked lights. Loss £125,000 to £150,000.
- " *St. Petersburg* (Russia). Dec. 29. The Winter Palace totally destroyed. (1836, 1862.)
- " *Naples*. The Royal Palace burned.
- 1838 **Royal Exchange** (London). Jan. 10. Soon after 10 on the evening of this day the building of the Royal Exchange was found to be on fire in its north-west corner, which was the part occupied by Lloyds Underwriters Rooms and Coffee-house. A number of engines were on the spot with 63 of the Fire Brigade men, "within an hour after the fire was discovered;" but before any water could be thrown on the building, *it was necessary to throw the hose and works of the engines*, owing to the intense frost; and the fire continued extending in a south-west direction, consuming the whole of the long range of offices belonging to the *Royal Exchange Assu. Corp.* At 12 P.M. these and Lloyds estab., and the coffee and captains rooms, presented one continuous body of flame. At this hour—the flames having then just reached the north-west angle of the building—the chimes struck up as usual the old tune, "There's nae luck about the house," and continued for 5 minutes. The effect was most extraordinary, and the tune was distinctly heard—for the last time there! At 1 o'clock, the north and west sides of the quadrangle were wholly in flames, and the fire was rapidly approaching the tower, the interior of which was subsequently entirely consumed. The musical peal of 8 bells, weighing in the whole about 3 tons, fell one after the other to the pavement below. The clock had a very singular effect while the tower was burning: the plates of the dial became red hot, and the hands pointed to the hour 1'25. At 3'30 the flames had reached the east side, and threatened the entire destruction of the shops and houses in Sweeting's Alley: here the firemen, with their 8 engines now assembled, became of real service, and cut off the fire in this direction.
- The whole of the interior of the Exchange was now burning; floor after floor gave way; and finally the external walls, carrying with them the whole series of the statues of the Kings and Queens of England. The statue of Charles II. in the centre remained entire: it had been placed there on the rebuilding of the Exchange after the fire of 1666. The cost of rebuilding had been £58,962, of which one-half was paid by the Corp. of Lond., and the other half by the Mercers' Co. A century later the sum of £10,000 granted by the Gov. had been expended in repairs and improvements.
- Mr. Braidwood's Rep., after the fire, stated the whole of the Royal Exchange, comprising four wings, occupied as Lloyds Coffee-rooms, the *Royal Exchange Assu.*, the Gresham Committee, the British Merchant Seamen's Inst., the Lord Mayor's Court Office, and other offices belonging to numerous individuals, were entirely consumed. The records of the Mayor's Court Office were destroyed. The Mayoralty Seal was for the time lost, but recovered; and a vast quantity of records kept in the vaults (including those of the *Royal Exchange Assu. Corp.*) were destroyed. The whole building was insured in the last-named office for £32,000; and there were insurances by the tenants for £15,000 beyond. The building was replaced by the handsome erection which now forms, as it were, the heart of the City—which organ it in some degree resembles in its ground-plan.
- An inquiry was instituted in view of ascertaining the cause of the fire, but nothing positive could be ascertained on the subject. It was the general opinion of the architects engaged, that it had been occasioned by the overheating of the stove in or below Lloyds Rooms. [FIRE PROTECTION, 1875.]
- " *London*. Feb. 9. Old Kent Road. Messrs. Edgington's tarpauling and sail manufactory and other premises consumed.

- 1838 *Temple* (London). March 6. Paper Buildings; about 20 sets of chambers destroyed, including some valuable libraries, important documents, etc. The fire originated in the chambers of W. H. Maule, Esq., M.P., afterwards Mr. Justice Maule. (1678.)
- " *Charlestown* (U.S.). April 27. 1158 buildings destroyed; damage to extent of one million sterling. (1796.)
- " *Liverpool*. May 14. Gibraltar Row. Great fire. (1837, 1838.)
- " *Millwall* (London). May 14. Sir C. Price's turpentine works; tremendous conflagration. The value of earth in stopping the spread of fire was here most successfully shown.
- " *Manchester*. Aug. 25. The premises of Messrs. Mackintosh, india-rubber manufacturers. (1829, 1841.)
- " *Liverpool*. Oct. 5. Robert Street North; 6 warehouses burned; fire afterwards communicated to others; explosions followed. Loss £150,000. (1838, 1842.)
- " *Coburg*. Oct. 17. The Ducal Palace on fire. The part the young Prince Albert took in extinguishing it is related himself in a letter under date 18 Oct. 1838, in *The Early Life of H.R.H. the Prince Consort*; compiled under the Direction of the Queen.
- " *Harrow-on-the-Hill* (Middlesex). Oct. 22. The greater part of the famous Grammar School burned.
- " *London*. Dec. 1. Shad Thames; rice-mills of Messrs. Ewbank & Co.; £20,000.
- " *Whitechapel* (London). Dec. 20. Sugar-house of Messrs. Francis & Co. Loss £120,000; ins. £27,000.
- 1839 *Collumpton* (Devon). July 7. About 132 houses, and many other buildings, burned. Thatched roofs.
- " *Spitalfields* (London). July 13. Large basket manufactory, and many small houses adjoining; very serious fire.
- " *New York*. Sept. 23. Great destruction; 46 commercial buildings burned; loss estimated at £800,000. (1836, 1845.)
- " *Mobile* (U.S.). Sept. Considerable conflagration. (1857.)
- " *Philadelphia*. Oct. 4. Great fire; 52 buildings; loss £30,000. (1799, 1850.)
- " *Pimlico*. Oct. 25. Great conflagration.
- 1840 *London*. Feb. 29. Lime Street; Pewterers' Hall and other property.
- " *Fordington* (Dorset). March 23 and 24. First day 6 houses; next day 46 others; all thatched. Chimney on fire.
- " *Rotherhithe* (London). May 3. Great conflagration at the vitriol, saltpetre, and white-lead works of Messrs. Brandram. A tank holding several hundred tons of oil exploded.
- " *Allington* (Dorset). May 22. 22 cottages and other buildings burned.
- " *York*. May 20. An accidental fire at York Minster destroyed the roof of the nave, and reduced the belfry to a shell. Cost of restoration £23,000. In *The Mirror* is the following: "A remarkable instance of the utility of Railways occurred on this last-mentioned occasion: an express was sent to Leeds for engines; the distance to be traversed was 48 miles: in the small space of 1 h. and 48 min. they had arrived and were playing on the fire." Fire caused by workmen. (1829.)
- " *Wapping* (London). June 16. 12 houses and other property; St. Andrew's Wharf. Loss £30,000 or more.
- " *London*. Aug. 27. East Smithfield. Great fire.
- " *Devonport* (England). Sept. 27. Dock-yard; several ships, and large quantity of stores burned. Damage £200,000.
- 1841 *Dundee*. Jan. 3. The cathedral and 2 other churches burned; all being in close proximity. Loss £30,000 to £40,000. (1855.)
- " *Southwark* (London). Jan. 8. Astley's Amphitheatre, with 40 houses. (1803.)
- " *Deptford* (London). Jan. 8. Extensive fire at wharf of General Steam Navigation Co. (1775, 1862.)
- " *Vauxhall* (London). Mar. 16. Store warehouses of South Western Railway; £40,000.
- " *Bristol*. April 28. Serious conflagration, Gt. W. Rail. Term.; £20,000. (1831.)
- " *Dunstable* (Beds). June 3. 21 houses burned.
- " *Smyrna*. July. 12,000 houses burned. (1811, 1845.)
- " *St. John's* (New Brunswick). Aug. 27. Ship-yard of Messrs. Owen & Duncan, and much other property.
- " *London*. Sept. 12. Piccadilly; fire in fruit shop, extended to mansion of Duke of Grafton and other houses. Loss £20,000.
- " *South Molton* (Devon). Oct. 19. 107 houses burned; loss over £20,000.
- " *Derby*. Oct. 21. Town Hall destroyed. Many records lost. The building had been insured, but pol. had lapsed. Loss £12,000.

- 1841 *Tower of Lond.* Oct. 30. The grand storehouse or armoury, founded by James II., burned, with 280,000 stand of arms, etc. It was found that the fire engines and other appliances here were in a most neglected and dilapidated condition. Loss of buildings and contents prob. £200,000.
- " *London.* Nov. 14. Blackfriars Road, oilcloth manufactory.
- " *Manchester.* Dec. 20. The warehouse of Messrs. Patchett & James. Loss £30,000. (1838, 1848.)
- 1842 **Hamburg.** This was one of the greatest fires of modern times. It broke out on the night of Wednesday in an old narrow street called the Deichstrasse, in which many warehouses built of wood, and 5 or 6 stories high, were situated. The fire was aided by a strong easterly wind. The following are some details of its destruction:—Number of streets burned through, 61; courts, 120; dwelling floors, 1716; dwelling cellars, 468; cottages, 498. Total houses, 1992; persons rendered houseless, 21,526. There were also burned 3 churches (including St. Nicoli), the Senate Houses, public offices, hotels, and principal libraries. Total area of burnt district, 30 acres. Damage estimated at £7,000,000. The buildings were mostly insured in the Municipal Fire Casse (founded 1667), which became exhausted. Several of the British Fire Offices (notably the *Phoenix*, *Sun*, *Royal Exchange*, and *Alliance*, in all to the extent of between £400,000 and £500,000) were interested. Public subs. were raised for the sufferers, in London, New York, and most of the large cities of Europe.
- " 25 *Liverpool.* Liver Mills burned. (1838, 1842.)
- June 8 *Ely* (Cambridgeshire). The Cathedral on fire; speedily extinguished.
- " 30 *Bermondsey* (London). Two large hop warehouses and 6 other buildings.
- Sept. 23 *Liverpool.* Most destructive fire at paint and oil manufactory, Paisley Street, extending to other properties and warehouses. Loss estimated at £700,000. Known ins. more than £350,000.
- The following account of this fire will convey a general idea of its magnitude and importance:—
- It broke out [at 3 o'clock A.M.] in a wooden shed, which was surrounded by others, offering in the materials, and in the highly combustible things which they contained, the readiest fuel for the flames. The Fire Police were called with all possible speed; but before they reached the spot, the fire, blown by a strong N.E. wind, had attained a most alarming height. More assistance arrived from time to time; the Mayor and Mr. Rushton the magistrate were soon on the spot giving directions. Mr. Highton, Governor of the Borough Gaol, and Mr. Whitty, the Superintendent of the Fire Police, were active in their exertions. The Police and Fire Police were concentrated round the fire. . . . At first the supply of water was scanty, . . . and water was procured with great labour over the high wall of the Waterloo Dock, . . . and water was brought from more distant sources in tanks drawn by horses; 14 fire engines were employed. No exertion, however, could arrest the progress of the flames. . . . From the numerous wooden sheds the fire soon spread to the back of the buildings in Formby Street, on each side of which were large warehouses, principally filled with cotton; and by 9 o'clock the valuable buildings, covering two acres of ground, were converted to a heap of blazing ruins. The fire still moved forwards towards the south: the houses in Neptune Street were at last attacked; and as the flames swept by Neptune Street, fears began to be entertained for the Borough Gaol, crowded with prisoners. People were employed to dash water on the roof, notwithstanding which, at one time, the lead began to melt. The fire attained its height at 1 o'clock, when its violence had been much subdued in Compton Street, but the warehouses in Formby Street had been turned to an immense furnace. Wall after wall fell in; a fireproof warehouse alone resisting the conflagration, while others around it successively sank. The site of some warehouses was known by "burning mountains of cotton," 60 or 70 feet in height, and sending up flames as high again. The inside of other warehouses, emptied of their contents, was like "a sea of liquid fire." By 9 the atmosphere around was heated to a high degree. From the Cheshire shore the appearance was terrific; and seen through the rigging in Prince's and Waterloo Docks, it appeared as if the shipping were on fire. By the immense exertions of the Fire Police and others, the fire spread no further. . . .
- On the 24th the ruins were still burning. When the wind freshened, or the firemen relaxed the pouring of water, or as the latent fire chanced to light upon some mass of fuel not quite exhausted, large lambent flames flared up and recalled the exhausted firemen to their toil. On the 26th it was thought that an effectual check had been given to the fire; but at 10 o'clock in the evening of that day it again broke forth, near the place where it was first discovered. Some more sheds were burned. . . . The wind was a little more northerly, and it was feared that a new direction might be given to the flames; but they were got under without much difficulty. . . .
- There were burned at this fire 48,000 bales of cotton, which, at £8 per bale, amounted to £384,000 alone. But these only formed one portion of the merchandize destroyed. (1842.)
- Dec. 22 *Liverpool.* The tar and rosin works of Messrs. Platt & Son burned; terrible conflagration; loss "considerably above £50,000." (1842, 1843.)
- Note.*—As a result of the fires this year in Liverpool, the rates on mercantile risks were considerably increased, and other conditions were imposed. See FIRE INS. PREMS. [LIVERPOOL.]
- 1843 *Port Republican* (Hayti). One-third of the town destroyed.
- Jan. 9 *Old Kent Road* (London). Floorcloth manufactory.
- " 23

- 1843** *Liverpool*. March 6. Fawcett's foundry. Loss £41,000. (1842, 1843.)
Mar. 15 *Valparaiso*. The greater part of the city destroyed, including much produce. Loss £400,000 or upwards. (1858.)
May 4 *Liverpool*. Duke's warehouses; again May 27. (1843.)
" 19 *Eton College* (Eton). A fire; speedily extinguished.
June 20 *Copenhagen*. Greater part of the richest quarter of the city burned, including many extensive warehouses and stores. Loss £250,000. (1795, 1844.)
Aug. 19 *London*. Tooley Street. Mr. Topping's wharf and other properties burned; loss £50,000. There were 7 fires in the metropolis during the day, all more or less serious. (1861.)
Nov. 20 *Pimlico* (London). Messrs. Bramah & Robinson's. Loss very considerable.
Dec. 28 *Liverpool*. Brancher's sugar-house. (1843, 1844.)
1844 *Note*.—During this year there were a number of incendiary fires in the agricultural districts of England.
Mar. 16 *Liverpool*. Fire in Oil Street. (1843, 1845.)
June 2 *Gravesend* (Kent). 25 houses burned. (1727, 1845.)
Aug. 2 *Exeter*. Large fire; 20 houses burned. (1775.)
Oct. 12 *London*. South-Eastern Railway Station, Bricklayers' Arms, burned, on the departure of Louis Philippe, King of the French.
Nov. 1 *Strathaven* (Banffshire, N.B.). About 40 cottages, tannery, etc., burned.
1844 *Copenhagen*. Considerable conflagration. (1843.)
" *London* (Canada). Extensive damage. (1845.)
1845 *Chatham Dockyard* (Kent). Feb. 11. Considerable fire. (1820, 1874.)
Mar. 2 *Greenwich* (Kent). Messrs. Henderley's patent rope and canvas works. £25,000. (1770, 1849.)
" 20 *Liverpool*. Apothecaries' Hall. £50,000. (1844, 1846.)
" 20 *London* (Canada). Extensive conflagration. Loss £200,000. (1844.)
April 10 *Pittsburg* (U.S.). Nearly 1000 buildings burned. Loss £300,000.
May 27 *London*. Raggett's Hotel, Dover Street, Piccadilly, burned. Several persons of eminence lost their lives.
" 28 *Quebec*. Great fire. Commenced in a tannery in St. Vallier Street, and burned the entire Quartier; 1050 houses and 20 lives were sacrificed. Timber houses and shingle roofs. Loss very considerable; ins. small.

Regarding this fire, an account in the *Ann. Regis.* for this year says:

The day was remarkably warm, and the heat and dryness of the few days previous had rendered the roofs of the buildings in the neighbourhood, and those more remote, highly susceptible of ignition. The adjoining and opposite dwellings were soon involved, and in an inconceivably short space of time the burning flakes, carried afar by the then rising wind, had ignited some buildings in the neighbourhood of the St. Roch Church, a considerable distance from the outbreak of the fire. The wind gradually freshened from the west, with a coming storm, and it was soon evident that all human endeavours to arrest the progress of the fire would be useless. Onward swept the flames; street after street fell before them. A species of whirlwind seemed to aid its fatal advances, for, in advance, in the rear, and on every side, the raging element developed itself in increasing fury. From 11 in the morning till midnight did this dreadful fire hold uninterrupted sway, until its career was arrested in St. Charles Street by pulling down some deal piles, and blowing up two houses, nearly one mile from the place of its outbreak.

One painful incident was the destruction of the hospital, to which, as being considered entirely out of the reach of the conflagration, numbers of sick persons of all classes were carried. The building became ignited by the flakes of fire carried from the distance by the wind; the unfortunate inmates, unable to help themselves, perished miserably.

- June 28** *Quebec*. Another serious fire broke out in St. Jean Quartier, the whole of which was destroyed; more than 1200 houses and 40 persons burned. Loss from these 2 fires £500,000. A subs. was started in England for the sufferers, headed by the Queen. (1834, 1862.)

Regarding this fire, a memorial signed by the Bishops of Montreal and Quebec, and others, states:

Beginning, as on the former occasion, at the extreme windward point of the suburbs, and fed by a gale of wind from the eastward (to which quarter the wind had changed in the evening of that day, after blowing from the westward for nearly a fortnight), the fire spread with irresistible fury through the length and breadth of both suburbs. The buildings, almost entirely of wood, fell before its rage with even greater rapidity than those on the 28th May. In 8 hours, of more than 1200 dwellings, 2 places of worship, 3 school-houses, and numerous stores and out-houses, nothing remained but blackened chimneys, roof-less walls, and piles of ruins. The burial-ground of the Protestant pop. has been traversed by the fire, and its wooden and marble memorials of the dead to a great extent injured or destroyed. . . . Several thousands of those whose dwellings had been destroyed in the last conflagration had here found shelter, by the kindness and hospitality of their fellow citizens, and were thus again driven forth, involved in one common ruin with those who harboured them. The morning of June 29th dawned upon more than 15,000 people whom the flames had left without shelter or food, scattered, with the effects they had been able to save, over the fields and open spaces without the walls, or flying to the neighbouring settlements. As on the former occasion, a third part of the city has fallen a prey to the flames; and Quebec, on the landward side, is reduced to limits not much larger than it possessed when Wolfe fell before its walls.

- July 3** *Smyrna*. Terrible fire; 4000 houses, a great number of shops and much merchandize burned; fire lasted 17 hours. (1841, 1860.)

- 1845**
July 19 *Blackwall* (London). July 8. A number of houses burned.
New York. 302 houses destroyed in best business part of city, including many warehouses; damage £1,200,000. (1839, 1848.)
 The *N.Y. Evening Post*, following up its retrospective account of the fire of 1835 (already quoted), passes on to this fire, thus:
 Ten years passed away before another such calamity occurred here. It was summer, instead of winter, but the flames spread with equal rapidity and almost equal damage. On the morning of July 19, 1845, the second great fire occurred, and an almost equal bankruptcy of ins. cos. followed. Nearly three hundred buildings were destroyed. The flames were accompanied by a mysterious explosion which terrified the firemen, and later investigations failed to reach the cause, but it was supposed to have been produced by a quantity of saltpetre stored in Broad Street. The result of this fire was similar to that of 1835. All Broad Street was remodelled. The surface was raised two feet, and the new warehouses invited a class of trade which doubled the value of lots. The site of the present Stock Exchange was before that a place of storage, and in that neighbourhood the explosion took place. New Street was also occupied for storage, but after the fire it also assumed a higher importance. These great fires, in fact, regenerated what then was the business part of the city. Since then our pop. has increased to a million. A new generation of bus. men has appeared, and the great fire is only remembered by those advanced in years.
- Aug. 5** *Matanzas* (Cuba). Nearly all the more wealthy portion of the city burned.
Toulon (France). The Arsenal, with naval and military stores, burned. Supposed to have been occasioned wilfully to conceal extensive misappropriations.
- " 13** *London*. Bishopsgate Street; extensive conflagration; cabinet-maker's, etc.
" 18 *London*. Aldermanbury; warehouses of Messrs. Bradbury, Greatorex & Co., dry goods—the largest then in the trade; and of Messrs. Coster & Co., and others. Loss £250,000. Mostly covered by ins.
- Sept. 13** *Moreton Hampstead* (Devon). About 50 dwellings and much produce. (1854.)
" 16 *London*. William Street, Blackfriars. Premises of Sir Charles Price & Co., oil and colour merchants. The fire broke out about 1 o'clock in a turpentine warehouse, and in a very short time the flame was simply tremendous. The engines soon arrived, land and floaters; but water seemed to make little impression. During the working of the engines sundry explosions, caused by the bursting of barrels of oil or of turpentine, were noticed. About 3 o'clock a fearful noise was heard to proceed from the building on fire: the contents of one of the turpentine vats had ignited and exploded, with a fearful outburst of flame. About 30 men were at that moment engaged in working one of the engines near the river. To escape the flames, they had no alternative but to jump into the Thames. Many of them did this, but the burning turpentine ran in the same direction, and, on falling into the river, floated along the surface. Some of the men who had gone into the water had been rescued, and were, with many others, on barges lying off the premises. These barges were now set on fire by the burning turpentine, and about 100 men precipitated themselves into the river as again the only chance of escape. A number of small boats now put off and rescued many of these persons; but some of these boats in their turn were set on fire. Some apprehension now began to be felt in reference to the Gas Works, quite near at hand; but the fury of the flames became gradually spent, and the fire burned itself out. The deserted fire engine was entirely burned, and near it were found the remains of a man, who had been unable to escape, literally burned to ashes. (1862.)
- Oct. 25** *Bombay*. About 200 houses destroyed. (1803.)
1846 *Gravesend*. Considerable destruction of property. (1844, 1846.)
Feb. 3 *Newcastle-upon-Tyne*. Great fire at the locomotive-engine manufactory of Messrs. Hawthorn. Loss £20,000. (1830, 1854.)
" 17 *Liverpool*. Great fire in Goree Warehouse, near St. George's Dock. It extended to other warehouses. Loss £150,000. (1845, 1846.)
- June 9** *St. John's* (Newfoundland). Nearly the whole of the town destroyed. Damage estimated at £1,000,000. (1826.)
- July 3** *Soham* (Cambridge). 13 houses and a number of other buildings burned. (1847.)
- " 13** *Nantucket* (Massachusetts). Almost destroyed.
" 17 *Liverpool*. The massive pile of buildings known as Apothecaries' Hall again destroyed. Ins. £23,500. (1846.)
- Aug.** *Albany* (N. Y.). Tremendous conflagration. The fire commenced in a small stable. The day was intensely hot. The wind blew a hurricane; and the fire soon raged with dreadful fury. It at length came towards several stables filled with hay, and great numbers of combustible buildings about them. A little water would have checked it here; but the engines were all engaged elsewhere. The sparks flew away on the wings of the wind, 200 rods it was stated. Tow and canal boats, schooners on the river, and 500 houses, with vast quantities of merchandise, were destroyed. The loss was prodigious. (1848.)

- 1846**
 Sept. 10 *Liverpool*. Sugar-house in Bachelor Street burned. Loss £60,000. (1846, 1847.)
 " 10 *Greenock* (Scotland). Sugar-house of Provost Farie consumed. Loss £50,000.
 " 23 *Croydon* (Surrey). Railway Station, etc., burned.
 Nov. 21 *Gravesend*. Large hotel and many houses consumed. (1845, 1850.)
 Dec. 31 *London*. Iron Gate Wharf, by St. Katharine Docks; great destruction of merchandize. Loss £200,000.
Philippopolis (Turkey). Extensive conflagration.
1847
 Jan. 27 *Liverpool*. Warehouses of Mr. Challoner and others, situated in Mason Street. Loss very considerable. (1846, 1848.)
 Mar. 14 *Battersea* (London). Creosote naphtha works and saw-mills of Mr. Bethell. Tremendous conflagration.
 " 20 *Soham* (Cambridge). Another considerable fire here. (1846.)
 April 5 *Southwark* (London). Kent and Essex Wharf; considerable fire. Mr. Payne, the City Coroner, held an inquest in view of ascertaining the cause of this fire. It appeared to have originated in a quantity of "shoddy." Verdict accordingly. [FIRE INQUESTS.]
 " 27 *Stoke Cannon* (Devon). Many of the best buildings in the village destroyed. Supposed origin sparks from railway engine falling on thatched roof. [LOCOMOTIVE ENGINES, FIRES CAUSED BY.]
 Sept. 18 *Cottenham* (Cambridgeshire). Considerable portion of village destroyed. (1852.)
Note.—The feature of this year was the number of incendiary fires in Cambridgeshire. Many of the Fire Offices withdrew from insuring agricultural risks in this county.
 Mr. T. M. Prebble pub. in Albany, N.Y.: *Account of Fires from 1845*.
1848
 Jan. *Chagres* (Spanish Main). The Custom House, with its stores and bonded warehouses, containing merchandize of great value, chiefly belonging to British merchants, burned.
 " 11 *Southwark* (London). Fire in the extensive vaults of St. Saviour's Church; many coffins burned.
 St. Saviour's Church consists of two distinct edifices under one roof, respectively called the old church and the new church. The eastern end of the building—in the S.E. corner of which the far-famed "Ladye Chapel" is situate—is the older portion of the building; and this is separated from the new church by a wall running up to the summit of the roof, the west front of which forms the eastern end of the latter edifice. Under the pavement of the old church are situated the vaults in which the respectable inhabitants of the parish have been interred for the last 2 or 3 centuries; and which now contained prob. about 400 coffins. The vault is entered by a flight of steps immediately opposite the doorway. On the day before the fire another parishioner had been interred in the vault, and, as was the custom, 8 candles in iron candlesticks were used. After this funeral was over the sexton left, as he believed, all safe; but he must either have failed to extinguish one of the candles, or he left it smouldering. The next morning smoke was discovered coming from the vault. The engines were sent for, and a great quantity of water was thrown into the vaults. Finally the firemen entered, and found the sawdust on many parts of the floor consumed, as also the outer shells of many of the coffins near where the new coffin had been added. In several cases even the leaden coffins were melted, and portions of the bodies burned.
 April 22 *Limchouse* (London). Great conflagration at works for making ship signal lights, and some adjoining premises.
 May 30 *Whitechapel* (London). Chicory manufactory of Messrs. Browne & Co., and other buildings.
 " 31 *Newport* (S. Wales). Railway bridge over Usk, 400 yards long, totally destroyed. Loss £20,000.
 A similar bridge over the Tyne, at Warden near Hexham, was also burned about the same time.
 June 7 *Orel* (Russia). About 1237 houses, 4 churches, 4 bridges, and more than 3 million roubles' worth of other property. Loss over £1,000,000 stg.
 July 17 *Constantinople*. Fire in the Pera quarter, by which some 3000 houses were destroyed. The reflexion of this fire was seen on the Mediterranean, 80 miles distant from the seat of fire. (1836, 1848.)
 Aug. 16 *Constantinople*. This was one of the most serious fires which even this city has ever seen. It began in a fruit bazaar in the Yemish Iskelessi, between the two bridges, and spread with a velocity that defied all efforts to check it. We fall back upon the description of an eye-witness:
 In the immediate neighbourhood of the fruit bazaar was the Yagh Kapan, or oil depôt; the magazines and warehouses being well stocked with this inflammable matter: on the other side, towards the arsenal, was an immense timber-yard, the greatest in the city, a quarter of a mile in length, 100 ft. in height, and 500 feet in breadth. By 8 o'clock both these

- 1848 places were invaded by the flames. . . . A compact mass of shipping was moored opposite this spot; and the masting of several Turkish vessels, laden with oil, wheat, and timber, soon took fire, and rendered the scene on the placid and tranquil water still more sublime than on land. The shrill cries of the commanders of the menaced vessels, the long, continuous, and savage howls of the mariners and sailors in their endeavours to draw their crafts from the theatre of the conflagration—all tended to impress the spectator with the grandeur of the dreadful calamity that had befallen the city. . . .
- Thence the fire spread along the hill, eating up houses, palaces, hanging gardens, the Mosque of Suleymanieh, and the Port of the Ulemas.
- According to a detailed estimate, the fire consumed some 2500 shops and 500 houses. About 40 of the latter were splendid palaces, belonging to the Sheik-ul-Islam, Mustapha Pacha, Said Pacha, Irret Pacha, Hassan Pacha, and others. The loss was variously estimated; but probably £3,000,000 was about the actual damage. (1848, 1852.)
- Aug. 17 *Albany* (N. Y.). 439 houses and buildings burned; several lives lost. Damage £600,000. The local Fire Offices survived their losses. (1846, 1849.)
- " 22 *Zell* (on the Moselle). About 200 houses destroyed. The flames urged on by S.W. wind. Much produce also burned.
- Sept. 9 *Brooklyn* (N. Y.). About 250 houses and stores, 3 churches, post-office, occupying some 15 acres in centre of city, burned. Fire arrested by marines of the Navy blowing up houses. Loss £150,000.
- " *Potsville* (Pennsylvania). About 35 of best houses burned. Loss £20,000.
- " *Boston* (U.S.). The Catholic Church burned. (1824, 1852.)
- " *New York*. Considerable fire; no details. (1845, 1853.)
- " *St. Louis* (U.S.). Great conflagration. (1849.)
- " *Newburg* (U.S.). Considerable fire. A letter from the U.S. dated Sept. 16 said: Never within the brief period of a week do I remember so many and such extensive losses by fire in the U.S. In the Atlantic States we have had a 2 months' drought, which has rendered timber buildings and many kinds of merchandize unusually inflammable: hence prob. the frequency of conflagration. . . . Fires in the woods are raging in many regions to a great extent, both in the U.S. and the British provinces. Butler Hill and several mountains on the North River are pyramids of flame; presenting a sublime spectacle to the night passengers between Albany and New York.
- Nov. 15 *Manchester*. Great fire at Gaythorn cotton works. Loss £40,000; ins. about £22,000. (1841, 1850.)
- " 25 *Liverpool*. Hill's rice-mill. (1847, 1851.)
- 1849 *London*. New Square, Lincoln's Inn. Several houses burned. A large number of title-deeds and other important legal documents destroyed, and great inconvenience occasioned to many families.
- Jan. 14 *Paddington* (London). Fire in Praed Street; great destruction of property.
- " 19 *Montreal* (Canada). Houses of Parl. with Library and Archives of Canada, burned. (1803, 1850.)
- April 25 *Glasgow*. Great destruction of property; Messrs. Wainwright's sugar refinery and Messrs. Boyd's soap and candle works. Loss £50,000. (1832, 1855.)
- " 18 *St. Louis* (U.S.). About one-half the bus. portion of this city burned. The conflagration broke out on board the *White Cloud* steamer, lying near the head of the landing, on the night of the 17th. The wind was blowing a gale from the N.E., and the fire was soon spread to other steamers lying along the Levee, and from them to the warehouses and stores. The whole of the warehouses on the river front were speedily destroyed, and the fire continued to extend southward over Main Street, Market Street, and Second Street. Its track extended over a mile. The City Hall was several times on fire, but was saved. Five banking houses, all the ins. offices, and 4 newspaper offices were burned, in add. to some 300 dwelling-houses. About 25 steamboats were destroyed. Loss about £600,000. (1848, 1850.)
- " 29 *Bermondsey* (London). Mr. Clapham's tannery works, Willow Walk, and a great deal of other property destroyed.
- Aug. *Albany* (N. Y.). Considerable fire. Loss £120,000. (1848, 1860.)
- Oct. 6 *London Wall*. Messrs. Gooch & Cousins' wool warehouse. Damage £70,339; salvage £26,974. Out of this loss arose some important questions regarding apportionments. Of these we have given a full outline under FIRE INS., HIST. OF, at this date.
- " 23 *London*. King's Head Court, Fish Street Hill. Extensive fire at wholesale chemist's, caused by considerable quantity of spirits of nitre becoming accidentally ignited.
- Nov. 10 *Greenwich* (Kent). Patent Kamptulicon works destroyed. (1845, 1860.)
- Dec. *Stockton* (California). Large fire. Loss £30,000. (1851.)
- " 24 *San Francisco* (California). Great destruction of property. Loss £250,000. (1850.)
- 1849 *Toronto* (Canada). The Cathedral Church of St. George burned. (1862.)
- 1850 *Ashwell* (Herts). About 26 cottages and a number of large farm buildings burned, with much produce. Loss about £30,000.
- Feb. 2

- 1850
Feb. 7 *Lambeth* (London). Fire commenced in building-yard of Mr. Geo. Myers, and burned a number of houses in the York Road and many adjoining premises. Great destruction and loss.
- Mar. 20 *St. George's-in-the-East* (London). [Formerly known as Ratcliffe Highway.] The extensive premises of Messrs. Wackerbarth, sugar refiners and bonded warehousemen, burned. Loss very large; supposed to have been occasioned by lamp of Custom-house officer. Ins. heavy.
- " 22 *Manchester*. The gigantic warehouses of Messrs. J. P. Westhead & Co., Piccadilly. Loss £100,000. These warehouses had 5 shafts piercing each floor, and covered by a dome skylight. When the glass became destroyed, as it speedily was with the heat, each shaft became in effect an immense flue, through which a fierce current of air passed. These roared like blast furnaces, and carried up rolls of ribbons and pieces of lighter goods, shooting them into the air like rockets. (1848, 1854.)
- " *Buffalo* (U.S.). Great fire in the heart of city. Loss £60,000. (1851.)
- " *St. Louis* (U.S.). Considerable conflagration. (1849, 1857.)
- April 19 *Lambeth* (London). York Wharf, Prince's Street; Messrs. Huck's patent pine-oil, resin, and grease works. Great destruction.
- " *Buffalo* (U.S.). Another great fire; Exchange Hotel and Railway Station burned. (1851.)
- May 4 *San Francisco* (Cal.). About 200 buildings burned.
- June (?) *San Francisco* (Cal.). Another fire; about 300 buildings burned. (1849, 1851.)
- July 14 *Philadelphia* (U.S.). 350 buildings burned; loss estimated at £300,000. (1839, 1864.)
- " 18 *Cracow* (Poland). A large portion of the city laid in ruins. (1801.)
- " 26 *Montreal* (Canada). Nearly 100 houses, many of them of solid construction, burned. Loss £100,000. (1849, 1852.)
- Aug. 11 *Gravesend*. 29 houses burned, and many others injured. Damage £100,000. Ins. £75,800. (1846.)
- Sept. 17 *San Francisco*. Third fire. 140 buildings destroyed. Loss nearly £100,000.
- " 19 *London*. Mark Lane; Corn Exchange and many warehouses burned. Damage £200,000.
- Oct. 3 *Southwark* (London). Great conflagration at Messrs. Brooke's, tallow-melters.
- Nov. 12 *Frederickton* (New Brunswick). About 200 houses burned; all wood.
- Dec. 24 *Canterbury*. The Cartham Paper Mills. Loss considerable. Ins. £16,000.
- " *Halifax* (Nova Scotia). North Barracks (where the fire commenced) and about 100 houses destroyed.
- 1851
Jan. 27 *London*. Houndsditch. Messrs. Bousfield's, outfitters. Loss £30,000.
- Feb. 19 *Duke Street and Tooley Street, London Bridge*. Considerable property destroyed. Loss £60,000.
- Mar. 10 *Berlin*. The Upper Parliament House burned.
- April 7 *Pimlico* (London). Furniture depository, Ranelagh Road, covering several acres. Full of goods. Collection of pictures valued at £40,000. Loss £100,000.
- " 14 *Liverpool*. Pack's Shed, Beacon Street. Loss £36,000. (1848, 1851.)
- May 3 *San Francisco*. Most devastating fire, extending over three parts of the city. Some 2500 houses and other buildings burned. The following brief description was written by a person who saw the fire:
- Frame buildings burned like tinder; iron-houses curled up like sheets of paper before a fire; brick buildings with iron doors and shutters gave way, and crumbled into ruins. Of scores of buildings supposed to be fireproof, within the limits of the burnt district, not a dozen remain, and it seems as if they were preserved by a miracle. Such was the firmness of the flames, that they leaped across streets 100 ft. wide, and ignited the buildings as if they were made of touchwood. And when the fury of the flames was exhausted, they were extinguished in as improbable a manner as they had ravaged. They destroyed one end of a wooden building, and went out, leaving the remainder standing.
- But the most wonderful part of the hist. of this fire is the energy and perseverance displayed by the citizens since. . . . In 48 hours after the fire, buildings were erected, and business was transacted over the still smoking ruins. On this the 11th day after the fire (including 2 Sundays), there are nearly 400 buildings erected or in progress of erection in the burnt district—most of them being completed and occupied. 1 hazard nothing in saying that in 60 days the whole district will be again covered with buildings.
- The loss was estimated at £700,000. (1850, 1851.)
- " 14 *Stockton* (California). Another extensive conflagration. Loss £200,000. Some estimates much larger. (1849.)
- June 22 *San Francisco* (Cal.). Another fire; 500 buildings burned. Loss £600,000. (1851, 1854.)
- " 23 *London Bridge* (Surrey Side). 4 large hop warehouses burned. In reference to this fire, the *Times* (City article) said, "There is reason to believe that the fire which destroyed £100,000 or £150,000 worth of property last Monday at London Bridge, and which was only a repetition of what had

- 1851 occurred in the same vicinity a few months before, might very probably have been immediately extinguished at the previous cost of £4 or £5 for a machine [*Fire Annihilator*], which has long been made known and tested." An inquiry was made into the cause of the fire; but nothing satisfactory was elicited.
- Liverpool.* Glover's warehouses. Loss £17,000. (1851, 1853.)
- July 21 *Havre* (France). Fire in largest shipbuilding-yard in France. Loss £40,000.
- Aug. 12 (1855.)
- " 30 *Long Acre* (London). Horne's coach factory, and much adjoining property.
- Sept. 18 *Bethnal Green* (London). Goods Station, Great Eastern Railway.
- " 26 *Buffalo* (U.S.). Most destructive fire; some 500 buildings destroyed, many of them of considerable magnitude. Loss £100,000. (1850.)
- Dec. 19 *Camden Town* (London). Collard & Collard's pianoforte manufactory. Damage £60,000.
- " 24 *Washington* (U.S.). Fire in the Library of the Capitol. Extinguished after some 35,000 vols. had been destroyed. The remainder of the building preserved. (1836.)
- " 28 *Hong Kong* (China). Part of Chinese quarter destroyed. (1867.)
- Note.*—Among the "fire incidents" of this year was the following, vouched for on good authority: On the 13 Feb. at 1 A.M. a "call" came in to the *West of England* Fire Station, "Fire at Deptford." The engine was started, the firemen trusting to obtain more precise information as they came nearer the locality. Proceeding at their usual rapid pace, they reached High Street, Deptford. No sign of fire presented itself. Suddenly one of the horses on the engine came to a dead stop, and refused to move a step further. Encouraging words, and then the whip were resorted to; but the horse threw himself on his haunches and refused to move an inch. The firemen, struck with the circumstance, looked round, and there through the fan-light of the house they saw the reflexion of a flame. The inmates were aroused, water obtained, and the fire extinguished. But *this* was not the fire to which the men had been called. *That* fire was in Globe Street, Deptford.—*Vide* Mr. W. Baddeley's *Rep. on the Fires of 1851*.
- 1852
- Jan. 4 *Southwark*. Great conflagration in timber-yard of Mr. Tipper, Gravel Lane; and some adjoining properties.
- " 26 *St. Luke's* (London). Great fire in Banner Street; looking-glass maker's, etc.
- Feb. 16 *Dartford*. Phoenix paper-mills. Loss considerable. Ins. £13,000.
- " 20 *Cambridge* (England). Destructive fire in Trinity Hall. Building saved. (1811.)
- Mar. 2 *Whitechapel* (London). Great fire at Messrs. Thorpe's paper warehouses.
- April 11 *Savannah*. Great conflagration. Loss £60,000. (1820.)
- " 19 *Cottenham* (Cambs). Some farm buildings and 13 cottages burned. (1847.)
- " 23 *Holme Fen* (Hunts). Fire extending over 6 miles of country among growing crops, etc. Loss £20,000 and land injured.
- " 24 *Harwell* (Berks). 8 farms and 24 residences burned.
- " *Bermondsey* (London). Margetson's tan-yard. Loss £36,000.
- " *Lancashire*. The extensive "Mosses" belonging to the Earl of Derby, between Manchester and Liverpool, much burned; great damage done.
- " *Westmorland*. The moors in this county greatly damaged by fire.
- " *Alldeeth* (Cambs). Farm buildings and 11 cottages burned.
- " *Manea* (Cambs). The village consumed.
- May 18 *Bermondsey* (London). Great destruction of property.
- June 10 *Lambeth* (London). At Messrs. Clowes, printers, Duke Street. The fire commenced in the warehouses. One compartment contained about 200 tons of nonpareil and other type. Others contained between 20,000 and 30,000 reams of paper. But in the warehouses filled with printed books perhaps the greatest destruction occurred. Among those burned were *Knight's Illustrated Bible*, the *Sunday Book*, the *Illustrated Shakespeare*, the *Royal Catalogue of the Exhibition of all Nations*, the *Church Catechism*, *Readings for the Rail*, the *Population Tables* (being the preliminary results of the Census of 1851). The whole impression of the *Illustrated Catalogue* printed for H.R.H. Prince Albert and the Royal Commissioners was burned, with the exception of a few copies sent to the Prince. Some portions of the "Thirty Sheet Catalogue" were also burned. Loss very considerable.
- " 16 *London*. Upper East Smithfield; Messrs. Hubbuck & Sons, wholesale oil and colourmen. The stores were very large, filled with combustible goods, and surrounded on all sides by inflammable property. The flames extended with great rapidity, and as the casks of colours became ignited, these assumed various hues: at one time ascending through the roof in the colour of deep crimson, to be presently changed to green, blue, or

- 1852
 July 8 *Montreal*. Considerable portion of City destroyed. The fire commenced in a block occupied by some poor French Canadians. There was very little water to be had, and the fire spread with great rapidity. The houses are described as disappearing "like brush-heaps." The flames even "licked up the furniture," as it was being conveyed along the streets in carts. A district of a mile and a half in length and half a mile in width was completely swept. Some fine terraces, some churches, 2 markets, some barracks, and hotels. In all 1108 houses were destroyed, these were inhabited by 2886 families, so that between 12,000 and 15,000 persons were left homeless. Loss in buildings £340,816. Contents probably as much more. Total loss estimated at £1,000,000. (1850, 1853.)
- July 10 *Boston* (U.S.). Fort Hill, Belmont Street, and nearly 60 buildings, burned. The fire when first discovered was very small, and a very small stream of water would have put it out; but the firemen had no hand engine. (1848, 1860.)
- " 15 *Haydon Square* (London). The fire broke out in the sail warehouses of Messrs. Coulborough & Potter. These were filled with inflammable goods. The firemen had obtained a mastery over the fire, when suddenly the roof fell in, and drove out the southern wall. Some tons of red-hot bricks fell, and covered up two of the firemen. Their comrades at once began removing the bricks, leaving portions of the skin of their hands adhering to these; but no human aid could rescue them, and they died. The loss was very considerable, and must have been enormous but for the prompt action of the Brigade.
- Aug. 8 *Tottenham* (London). Oil-mills on the Lea. A vat holding 70 tons of oil burst, and ran into the river, and over the road. Other vats followed; but in the end the fire was overcome.
- Sept. 12 *London Wall*. Great fire; Messrs. Brown, drysalters, and Messrs. Gibbins, varnish manufacturers. Great damage.
- Oct. 4 *Spitalfields* (London). Serious conflagration; premises of Mr. Grinsdell, builder and contractor.
- Nov. 12 *Sacramento City* (Cal.). The city almost entirely burned up: 2500 buildings destroyed. Loss £1,000,000. (1854.)
- " 30 *Battersea* (London). Phillips' Patent Fire Annihilator Works burned. [FIRE ANNIHILATORS.]
- Pittsburg* (U.S.). Great conflagration.
- Nevada City* (U.S.). Burned.
- Constantinople*. It was reported that 7 fires, occurring in one night, destroyed about 3500 houses. (1848, 1859.)
- Note*.—In regard to the fires in the Californian cities during the last few years, Mr. Joseph Bird, of Boston, U.S., in his *Protection against Fire*, offers the following obs.:
- When the people arrived in California, they commenced to erect a city. But there was no proper material with which to build, one which would be safe from destruction by fire; they therefore put up thousands of buildings of light boards, and of lath and plaster, and the partitions were of calico, shirting, sheeting, and even of paper. These were crowded together in a country subject to high winds and droughts, and, of course, where there was no fire department. Of course, also, the cities were destroyed in less hours or minutes than they were days in building. They were rebuilt in the same manner, and with the same result. Then when the ground was once more covered with the same material, or nearly so, the Eastern cities had sent fire apparatus, and a "splendid fire department" was the consequence. Then came another fire, and before the department could get to work, whole streets of light wood, cotton, cloth, and paper, were on fire; and the department was obliged to seek safety by keeping out of the way of the devouring element.
- At length the people discovered that if they were to have a city, it must be built of brick and stone; and when they had at last succeeded in erecting such buildings, and perfecting their fire department, the conflagrations ceased to destroy them. Still another lesson should be learned from these Western fires. After the first fire the buildings were not all of boards, cotton, cloth, and paper; many fine warehouses were erected, only to be destroyed in the great conflagrations caused by the cheap structures others had put up, as at first. People must not only erect substantial buildings, but the law must require that only such shall be made if a city is to be safe from destruction by fire. A few dangerous buildings, with open elevators, and filled with great quantities of inflammable goods, may cause the destruction of a city in a furious gale of wind.
- 1853
 Feb. 24 *London*. St. Paul's Churchyard. Messrs. Pawson's warehouses. Loss £40,000.
- Mar. 19 *Windsor Castle*. Prince of Wales's Tower. Damage slight.
- " *New Orleans* (U.S.). Great conflagration. Loss £130,000.
- May 27 *Liverpool*. North Shore cotton-mills. Loss £80,000. (1851, 1854.)
- June 6 *London*. City Road. This fire threatened to be one of the most disastrous London had yet seen. It broke out in the Gutta Percha Co.'s Works, adjoining which was the Patent Firewood Factory, and next again the

- 1853** Patent Cooperage Co.—being a combination of inflammable trades hardly to be equalled. The fire broke out very suddenly in the main building, and one of the first incidents observed was flames issuing from the man-holes of two enormous tanks of naphtha. Some intrepid neighbours stifled these vents, and so the fire was kept in abeyance, in some sort, until the Brigade could arrive. More efficient service than the extinguishment of these naphtha vats was never rendered on any occasion; and it is an instance of the importance of timely aid even when things look desperate. In addition to the premises already named, there were numerous warehouses and other mercantile buildings on the opposite side of Wenlock basin, which is 100 ft. wide. Some of these actually ignited; but there was a good attendance of engines and firemen, with abundance of water close at hand. The conflagration was finally subdued, with a loss of about £100,000.
- June *Louisville* (Kentucky). Considerable conflagration. Loss £20,000.
- Aug. 10 *London*. Golden Square. Kirkman's pianoforte manufactory, with chapel and 8 houses.
- " 14 *Dover* (Kent). Great conflagration at Messrs. Walker & Co.'s oil and seed crushing mills, the extent of which was very large. Loss £40,000. While this fire was raging, and prob. from the effect of the heat upon the chalk cliff above, a mass of some 1500 tons fell and buried the fire engines and injured the men working them, and many others. (1808.)
- Sept. 10 *Millwall* (London). Messrs. Scott Russell & Co.'s shipbuilding works; loss £100,000. (1855.)
- " 30 *Chandos Street* (London). Messrs. Savill & Edwards' printing estab.
- Oct. 4 *Memel* (Russia). The town, with large quantity of military stores, destroyed.
- " 4 *Halifax* (Yorks). Messrs. Whitworth's woollen mills. Loss £80,000.
- Nov. 10 *New York*. Messrs. Harper's printing estab. and adjoining properties; loss £274,900; ins. £77,600. Camphine lamp. (1848, 1853.)
- Dec. 3 *London*. Thomas Street. Selby & Co., Gosnell & Co., and Saunders, paper-box makers.
- " 20 *New York*. Another great fire; Front Street and shipping. Loss £130,000. (1853, 1854.)
- " 23 *Esher* (Surrey). Royal paper-mills burned. Loss, premises, stock and machinery, estimated at £100,000.
- " 25 *Montreal* (Canada). Great fire; loss heavy; English offices principally interested. (1852, 1856.)
- " 26 *London*. Thames Street, near St. Michael's Church; considerable destruction.
- " 29 *Bradford* (Yorks). Warehouses of Messrs. Berwick & Gilles, and Messrs. Broadbent. Loss £40,000.
- " 31 *London*. Bread Street, Cheapside. Messrs. Townend & Co., hat manufacturers. Loss about £100,000. The Lord Mayor (Sidney) personally took part in the protective measures necessary to prevent the spread of this fire. The entire district was in great peril. The ins. in force on the several premises injured amounted to £180,910.
- 1854**
- Jan. 3 *Rochdale* (Lancashire). Extensive woollen mills of Kelsall.
- " *New York*. Metropolitan Hall and Lafarge House. Loss £100,000. (1853, 1858.)
- Feb. 1 *Quebec*. The Parliament Buildings, with valuable Library. Cost of buildings £60,000. (1845, 1862.)
- " 13 *Bromley* (? Essex). Claussen's Patent Flax, Hemp, and Jute Co.'s mills burned. Engines summoned by telegraph. Loss very considerable.
- Mar. 1 *Manchester*. Warehouses of Messrs. Ryland, and others. Loss £183,000. About two-thirds insured over whole damage. (1850, 1858.)
- June 21 *Whitechapel* (London). Messrs. Pinchin & Johnson, oil and colourmen; loss £20,000.
- " 25 *Bermondsey* (London). Great fire at Messrs. Morgan & Son's rope and twine works, etc.
- " 26 *Olney* (Bucks). About 60 houses and cottages burned, and much farming stock. Origin accidental. The poet Cowper resided here.
- July 11 *San Francisco*. About 70 houses and wharves burned. Loss £60,000. (1851.)
- " 13 *Sacramento City* (Cal.). About 200 houses burned. Loss £100,000. (1852.)
- " *Columbia* (California). Almost entirely burned.
- Aug. 10 *Varna* (Black Sea). The magazine and stores of the allied armies, forming the dépôt during the Crimean expedition.
- " 17 *Moreton Hampstead* (Devon). 21 houses burned. (1845.)
- " 17 *Pimlico* (London). Messrs. Cubitt's building yard. Loss immense. [FIRE-PROOF BUILDINGS.]
- Aug. 30 *London*. Lower Thames Street; Messrs. Baiss, wholesale druggists, and 6 adjoining houses. Steeple of St. Magnus Church ignited.

- 1854**
 Oct. 4 *Memel* (Prussia). Town nearly destroyed, and immense stores of produce consumed, much of which belonged to English merchants. The Russian ports being blockaded had sent much add. produce here. Loss immense. (1878.)
 „ 5 *Gateshead* (Durham). Fire broke out in worsted manufactory at midnight. Extended to large bonded warehouse, containing great quantities of chemicals; great explosion followed, causing death of 50 persons or upwards. [EXPLOSIONS, sub-heading *Chemical Stores*.] Flames extended over the Tyne by aid of shipping, and destroyed much property in *Newcastle-on-Tyne*. Damage estimated at £1,000,000. (1846, 1866.)
 „ 19 *Evesham* (near Oxford). Considerable portion of village burned. Steam threshing machine.
 „ 26 *Liverpool*. The bonded warehouse, Lancelot's Hay. Loss £130,000; ins. £95,000. (1853, 1859.) In the *Quarterly Review* for Dec. this year there is the following regarding this fire:
 The great fire, again, which occurred in Liverpool in Oct. last, was occasioned by the explosion of spirits of turpentine, which blew out, one after another, 7 of the walls of the vaults underneath the warehouse; and in some cases destroyed the vaulting itself, and exposed to the flames the stores of cotton above. Surely some law is called for to prevent the juxtaposition of such inflammable materials. The turpentine is said to have been fired by a workman who snuffed the candle with his fingers, and accidentally threw the snuff down the bung-hole of one of the barrels of turpentine. The warehouses burned were built upon Mr. Fairbairn's new fireproof plan, which the Liverpool people introduced some years ago, at great expense to the town.
 Dec. 3 *London*. Whittington Club House, Strand.
Note.—The event of the year was a number of attempted fires in the warehouses in *Manchester*. A meeting of the agents of all the principal offices interested in the bus. was held, and steps taken in view of suppression and discovery.
1855
 Jan. 4 *Glasgow*. Messrs. Gray & Co. Loss £10,000, which was fully covered by ins. (1849, 1858.)
 Feb. 16 *London*. Blackfriars Road; Messrs. Routledge and Messrs. Rennie's manufacturing premises; damage £150,000. Mr. Braidwood's son-in-law (Jackson) lost his life here.
 Mar. 16 *Bermondsey* (London). Lucas' Wharf, and many other water-side premises destroyed. There were upwards of 5000 barrels of tar, besides linseed-oil and other inflammable merchandize, burned.
 „ 31 *Sunderland*. Destructive fire at Mr. Fairley's, wholesale chemist, which extended to other properties and dwellings. Value of buildings £10,000; stock in add.
 April *Needlingworth* (Cams). Village nearly destroyed.
 May 3 *Millwall* (London). Etna Steam Battery in course of construction at Messrs. Scott Russell and Co.'s. Loss £120,000. (1853, 1856.)
 June 10 *Dundee* (Scotland). Flax warehouses of Messrs. Collier, and others. Loss £50,000. (1841, 1867.) [FLAX.]
 „ 28 *London*. Curtain Road, Shoreditch; cabinet-maker's premises; £10,000.
 July 19 *Chamounix* (Switzerland). Village partly burned, including several of the principal hotels and 19 houses.
 Aug. 28 *Havre* (France). Great conflagration at spirit stores. Prince Jerome Bonaparte was in attendance. (1851.)
 Sept. 14 *Wolverhampton* (Staffordshire). Naphtha works of Messrs. Booth & Co. exploded and carried the liquid fire into all parts of the premises, and into the canal, etc., in consequence of which some adjacent properties ignited.
 Oct. 9 *Chicago* (Ill.). Great fire; damage £130,000. (1857.)
 Nov. 12 *Stirling Castle* (Scotland). The "Governor's House" burned. A brave gunner named Haines lost his life by his exertions in protecting the powder magazine, which contained 800 barrels of gunpowder.
Note.—A feature of the year was the number of incendiary fires again occurring in *Cambridgeshire*.
1856
 Feb. 1 *Rotherhithe* (London). Messrs. Evans & Co. and others. Extensive fire.
 „ 14 *Clerkenwell* (London). Exmouth Street. Large factory and 14 houses burned.
 „ 28 *London*. Upper Thames Street. Oil warehouse of Messrs. Alcock, Hinton & Co. Great destruction.
 Mar. 12 *Millwall* (London). Messrs. Scott Russell & Co. (3rd fire). Much valuable machinery destroyed. (1855.)
 April 1 *Fleet Street* (London). Messrs. Dobbs' manufacturing premises.
 „ 13 *Christiania* (Norway). A large part of the town burned. (1624, 1858.)
 „ 13 *Edinburgh*. Caledonian Distillery. Loss £30,000. (1835, 1857.)
 „ 16 *Kenton* (Devonshire). The village destroyed; thatched roofs.
 July 17 *Shad Thames* (London). Flour-mills; loss about £100,000. (1859.)
 Aug. 12 *Westminster*. Messrs. Broadwood's pianoforte manufactory, containing about 1000 instruments. Loss very great.

- 1856 *St. Martin's Lane* (London). Messrs. Almond's manufactory, etc. Loss £20,000.
- Nov. 9 *Montreal*. The Cathedral destroyed. (1853, 1857.)
- Dec. 10 *Canton*. The foreign factories were destroyed by the natives. (1835.)
- " 14 *Montreal* (Canada). Jan. 8. The English Cathedral burned. (1856, 1874.)
- 1857 *Dublin*. Fire at premises of Bank of Ireland. (1837, 1859.)
- Jan. 19 *London*. Tabernacle, Tottenham Court Road, erected by Geo. Whitfield, burned.
- Feb. 23 *London*. Fleet Street; Messrs. Bacon, Perkins, & Fitch, printers of bank-notes.
- Mar. 11 *Baltimore*. Large conflagration; number of mercantile warehouses. Loss £100,000. (1873.)
- April 14 *Sandusky* (Ohio). Large fire; loss £20,000.
- April *Appalachicola* (Florida). Large conflagration; loss £40,000.
- " *London*. St. Katharine's Docks. Block F. with its contents consumed. (1858.)
- May 27 *London*. Messrs. Pickfords' (the great carriers) warehouses, Chalk Farm. This is one of the great fires of modern times. The premises extended over 5 acres of ground, and embraced buildings of great magnitude, and stabling for several hundred horses. About 10.30 P.M., when the vast collection of goods from all parts of Lond. were accumulated within the sheds, and were in process of being arranged ready for despatch by the night goods trains, hundreds of carmen and clerks being engaged in the operation, a blaze of light was seen suddenly to issue from the premises where the horse fodder was kept. The first effort was to release the horses, which was speedily done. The flames spread with great rapidity. Shed after shed was ignited; building after building succumbed. The trains of loaded goods could not be removed in time, and many were burned. Some burning ruins fell upon the barges in the canal, and ignited these. The adjoining premises, more especially Messrs. Collards', were in great danger. All the west of London was illuminated with the flames. The hills at Hampstead and Highgate stood out in the brilliant glare. We were at Brixton Lodge (many miles away), and could see to read distinctly. The Fire Brigade protected the adjacent properties, and finally the fire burned itself out. One horse only perished, an incurably vicious brute known as "The Man-hater;" no one could approach him to cut him loose, and thus he perished a victim to his own ill-temper. The loss was immense, but was distributed among nearly all the British offices.
- " 28 *Southwark* (London). Montague Close; several large warehouses burned.
- Aug. 5 *Edinburgh*. Great fire in St. James's Court, Lawn Market; no fewer than 160 persons were burned out. In the house so destroyed David Hume had once resided. James Boswell succeeded him as tenant, and here Dr. Johnson was received as a guest by his biographer. (1856, 1861.)
- 1857 *Chicago*. Considerable fire; loss £70,000. (1855, 1859.)
- " *Mobile*. Large fire; loss £40,000. (1839, 1860.)
- " *New Britain* (Connecticut). Loss £25,000.
- " *St. Louis* (U.S.). Considerable conflagration; £20,000. (1850, 1859.)
- " *Plymouth* (Indiana). Considerable fire; damage £20,000.
- " *Port Elizabeth* (Cape Colony). Best portion of town destroyed; loss about £100,000, mostly falling on Brit. ins. offices. (1865.)
- 1858 *Manchester*. Doubling mill of Messrs. Lewis & Co.; £20,000. (1854, 1860.)
- Mar. 29 *Christiania* (Norway). Exchange, Bank, and large part of city burned; loss about £220,000. (1856.)
- April 13 *London*. St. Katharine's Docks. Warehouse E., containing hemp, jute, coir, cotton, ropes, linseed, and other merchandize. Loss £40,000. (1866.)
- May 27 *London*. Fresh Wharf, London Bridge. Silk destroyed, £25,000. [15,000 gold watches were removed to a place of safety during the fire.] Total damage, £100,000. (1760.)
- June 21 *London Docks*. Great explosion; loss about £150,000. Supposed to have been caused by spontaneous combustion. (1859.)
- " 29 *Paris*. Warehouses of the Grand Condé, Rue de Seine, burned. Loss £60,000. (1820, 1869.)
- June *Blois* (France). Forest fire; domain of Chambord, near Blois. 184 acres of fir and other trees burned.
- " *Limehouse* (London). Messrs. Forest, Dixon & Co.'s premises destroyed; arches of Blackwall Railway injured. Great damage. Insured.
- July 19 *Amsterdam*. Great fire, manufacturing premises, Lynbaansgracht. (1791, 1874.)
- " *Antwerp*. Great fire; Town Hall, Bourse, etc., destroyed. (1576, 1861.)
- Aug. *Astrakan* (Russia). Town nearly destroyed under the following circumstances: The fire first broke out among a quantity of timber lying on one of the quays of the Volga. It soon spread to another quay filled with casks.

- 1858** The flames were fanned by a violent breeze, and notwithstanding the exertions of the firemen, they extended to and destroyed a number of houses. About 3 in the morning some of the burning beams, having been carried by the wind into a boat laden with wood in one of the docks of the Volga, the fire extended to a number of other boats also laden with timber, causing a terrible body of flame. One of these burning boats came into contact with a barge laden with 96,000 kilogrammes of gunpowder. Before the barge could be scuttled it exploded. The burning timber was by this cause scattered to enormous distances; in one case to a corn store, 4 versts [more than 2 miles!] away, which it set on fire. A number of other boats laden with stores for the army thus took fire. The fire continued over the next day. In add. to 11 quays covered with timber and produce, there were 121 houses burned and many lives lost. Loss immense.
- Sept.** *Russia.* Forest fires extending over hundreds of miles.
Oct. 13 *New York.* The Exhibition building burned. (1854, 1859.) [INTERNATIONAL EXHIBITIONS.]
- Nov. 12** *Glasgow.* Messrs. Grant & Co.'s spinning mill; £90,000. (1855, 1866.)
" 13 *Valparaiso.* Most destructive fire. Loss £600,000, about half insured. Several of the British offices suffered severely. Out of these losses arose some important questions regarding fire re-insurances under "Guarantee Treaties." The *Liverpool & London* had entered into treaties of this character with the *Unity Fire*, and also with the *Lancashire*. The points in dispute between the two first-named cos. were adjusted amicably. In the case of the *Lancashire*, on its being sued by the first-named co., it appealed to the Court of Chancery for equitable relief. The results will be fully reviewed under RE-INSURANCE, *Fire*. (1843, 1859.)
- 1858** *Auckland* (New Zealand). Large portion of city destroyed.
1859 *Sheffield* (Yorks). Jan. 30. Messrs. Unwin's timber-yard; £10,000.
April 30 *Bristol.* Sugar refinery of Messrs. Fridge & Tripp. Loss about £100,000. Ins. in British offices, £63,500.
- May 16** *Key West* (Florida). Buildings extending over 20 acres burned; loss £550,000.
" 17 *St. Louis* (U.S.). 15 blocks of buildings and 23 steamboats; loss £600,000. (1857, 1867.)
" 20 *Lime Street* (London). Messrs. Hubbuck & Co.'s warehouses; heavy loss. (1852.)
- June 12** *Perth* (Scotland). Considerable fire in timber-yard; gas works in danger.
July 1 *Belfast.* Victoria Chambers; loss £100,000. (1859.)
" 13 *Shad Thames* (London). The extensive flour-mills again burned. (1856.)
" 26 *Liverpool.* North Shore corn-mill; loss £25,000. (1854, 1860.)
" 26 *London Docks.* Brandy Vault. This vault is appropriated exclusively to the storing of brandies, and contained at this time upwards of 20,000 casks of the finest description of spirits. In the morning at 8 A.M. the cellar appeared all right, but about 9.15 an alarm was given that the vault was on fire, and soon a dense black smoke began to issue in volumes. The principal authorities were soon on the spot, and great efforts were made to stifle the fire, but without success. The Fire Brigade had been summoned, and on the arrival of the two large floating engines, it was resolved to flood the vaults. The tide was high, and this work was speedily accomplished, many other engines having arrived, and lent their aid. While the men were working, they were frequently struck down apparently insensible, on inhaling the dense black vapour that issued from the vaults. As many as 50 men were so lying at one time—some in a very dangerous condition. It was 1 o'clock before the fire was got under. A subsequent examination showed that whole tiers of casks, containing in some cases spirits 50 p.c. above proof, had been on fire, and were deeply charred. The number of barrels actually burned did not exceed 50. The cause of the fire could not be ascertained. The consequences which might have followed from less prompt action it is impossible to estimate. (1858.)
- Mr. John Drummond, one of the Managers of the *Sun Fire*, said before the Select Parl. Committee on Fires in the Metropolis, 1862: "The whole of the wine trade, I believe, is hardly insured at all, because they consider it so safe in the Lond. Docks that they do not think it worth while to insure. . . . The Lond. Docks are largely insured, but the wine of individuals, I believe, is hardly insured at all." (Q. 1847-8.)
- Aug. 2** *Whitechapel* (London). Extensive cooperage in Rupert Street.
Sept. 13 *Belfast.* Howey & Co.'s print works, Old Park; loss £25,000. (1859, 1875.)
" 15 *Chicago.* The entire block bounded by Clinton Street on the N., Canal Street on the W., and Lake and Fulton Streets, burned, including lead-works, hydraulic mills, etc. Loss £100,000. (1857, 1860.)
" 17 *London.* Ivy Lane, Paternoster Row. One of the houses burned had many

- 1859 literary and historic associations. It was a large building known as Nos. 3 and 4, Ivy Lane. The lower part was known as the "Literary Coffee House and Reading Rooms"—often spoken of as Dr. Johnson's Club. The occupation was, indeed, in direct descent from the club formed by that great man, and orig. known by the sign of the "King's Head." "Thither he constantly resorted, and with a disposition to please and be pleased, he would pass those hours in a free and unconstrained interchange of sentiments, which otherwise would have been spent at home in painful reflection."—*Boswell*. This club, which was the precursor of the celebrated Literary Club which met in Gerard Street, Soho, consisted of 9 members—Dr. Johnson and 8 others, all well-known men of the time.
- Sept. *Buttermere* (Wilts). Village nearly destroyed.
- " *Crowell* (Oxon). Village much damaged.
- " *Woodford* (Essex). Town partly burned.
- " *Willingham* (Cambs). Village considerably injured; two fires.
- " *Constantinople*. Fire in the quarter Hass-Keni, built like an amphitheatre on a hill-side, and occupied by some 30,000 Jews. After some 60 houses had been burned, it was supposed the fire was extinguished; but it broke out again the next day, and destroyed upwards of 1000 houses. A public subscription was made. (1852, 1862.)
- Dec. 13 *London*. Walbrook: wholesale stationers, etc. The two houses burned bore a tablet stating that they had been erected in 1668, after the Great Fire of London.
- " 17 *Fredericksburg* (Denmark). A famous palace built by Frederick II. destroyed.
- " 19 *Dublin*. A remarkable fire occurred, which threatened consequences of a most serious character. A large tank belonging to the Hibernian Gas Co., and filled with gas-tar, burst. The tar flowed towards the retort-house, and was there set on fire by the furnaces. The flames seized upon two large gas-holders containing the gas prepared for the day's consumption; and each of these exploded, doing much less damage than could have been expected. The Fire Brigade was in attendance, but the frost was so intense that hardly any water could be obtained. That which was used speedily congealed, and the dresses of the firemen soon became covered with spray, which becoming frozen presented the appearance of glittering armour. No lives were lost. (1857, 1860.)
- " 29 *New York*. Beckman Street; loss £180,000. (1858, 1860.)
- 1859 *Valparaiso*. Another destructive fire. (1858, 1860.)
- " *Melbourne* (Australia). Considerable fire; no details.
- " *Ballarat* (Australia). Considerable conflagration.
- 1860 *Lawrence* (Massachusetts). A mill employing 600 or 700 hands, and 5 stories high, suddenly fell to the ground. It being near the evening, bonfires were lighted to enable the ruins to be searched for the dead and dying. Either from one of these, or from some other cause, the ruins ignited, and speedily burned to death all who had otherwise survived. The scene was one of surpassing horror.
- Jan. 10 *Manchester*. Hanover mills, running 22,000 spindles, and 138 engines burned. Loss £25,000. (1858, 1866.)
- Feb. 2 *New York*. Great fire; 50 persons perished. (1859, 1862.)
- " 13 *Barbadoes*. Commissariat buildings and many others. Total damage about £500,000. Insured in British offices, £130,000.
- " 18 *Boston* (U.S.). Merchants' Row. Loss very considerable, partly covered by Brit. offices. (1852, 1861.)
- " 19 *Horsleydown*. Cooperage of Mr. Bradford, with much adjoining property, destroyed.
- " 27 *London*. A great fire in Wood Street, attended with remarkable circumstances. About 11:30 A.M., the workmen of the Central Gas Co. were doing some repairs to the gas-pipes on the premises of Messrs. Morley & Co., lace and silk merchants, etc., Wood Street; when, by some accident or mismanagement, there was a large escape of gas in the basement, which ascended the stairs and passages. By some means unknown, this gas became ignited, and a great explosion followed, setting the premises on fire in almost every part. The Brigade attended with speed, and poured volumes of water upon the flames, but they were not extinguished; and ultimately they extended to the next premises. The water was almost as destructive to the stock as the fire; and as a result of their joint action, there was a loss of not far short of £150,000. The ins. offices paid, but brought an action (in the name of the insured) against the Gas Co., seeking to render it liable on the ground of negligence. It did not appear, however, that the workmen had omitted any usual precaution, and the action failed. [GAS.]

- 1860
 Mar. 10 *Preston*. Messrs. Haslam's cotton-mills, running 29,000 spindles, burned. Loss £20,000.
 " 13 *Mobile* (U.S.). Union Cotton Press, theatre, etc.; damage about £50,000. (1857.)
 April 17 *Greenwich* (Kent). Wood's Wharf, opposite Seaman's Hospital Ship. Large amount of timber, spars, cordage, etc., and some 50 houses and other buildings, burned. (1849.)
 " 18 *Chicago*. The Illinois Central Ry. Depot. Insured in *Liverpool and London* for £30,000—one line. (1859, 1866.)
 " 22 *London*. Red Cross Street, Barbican, Messrs. Johnson & Co., boot and shoe warehousemen. £30,000.
 " 29 *Liverpool*. Sailors' Home destroyed. (1859, 1862.)
 June 15 *Beverley* (Yorks). Messrs. Crosskill, agricultural implement manufacturers; £25,000.
 " 22 *Mossley* (Yorks). Messrs. Mayall's Britannia cotton-mills, carrying 120,000 spindles—one of the largest in the U.K.—burned. Loss £130,000.
 July 30 *Shadwell* (London). The extensive rope, line, and twine factory of Messrs. Frost Brothers, with immense stock, expensive machinery, etc., burned. Loss £50,000. Supposed to be the work of an incendiary.
 Aug. 17 *London*. West Kent Wharf and Hibernia Wharf; hops, etc., continued to burn for nearly a month. Loss £200,000.
 " 18 *Ratcliffe Cross* (London). The wharf known by this name, including premises of Messrs. Parkinson & Salmon, wholesale biscuit-bakers, and several others. Loss very considerable.
 " 26 *London*. St. Martin's Hall, built for Mr. Hullah's musical classes, and other premises, burned.
 " 27 *Smyrna*. At about 7.30 in the morning pistol-shots in the streets announced that a fire had broken out somewhere. It turned out to be at St. Dimitri, a sort of Faubourg of the town, consisting of very old houses built of timber, and inhabited principally by Greeks. The wind was strong, and for 7 hours the fire had unimpeded play. At length the Rue des Roses was reached, and here *every fifth house on each side is of stone*. A great effort was made to stop the fire here, but not with entire success. However, soon after the wind abated, and the fire ended. There were about 700 houses burned. The fire was believed to have been occasioned by a woman who lit a candle in honour of the Virgin. The public estab. were thrown open to receive the sufferers. (1845.)
 " 31 *Blackwall* (London). Thames' Iron-works destroyed.
 Oct. 10 *Limehouse* (London). Messrs. Goodhart's sugar refinery; £30,000. Out of circumstances associated with this fire arose much agitation regarding "Days of Grace" under fire pol. GRACE, DAYS OF (Fire).
 Nov. 4 *London*. Crown Street, Soho. The pianoforte manufactory of Messrs. Chappell burned. [1864.]
 " 11 *Dublin*. The Kildare Street Club House and a large Library burned. (1859,
 " 22 *Clerkenwell* (London). At the House of Correction. The building destroyed contained the clothing of some 1400 prisoners, which when they came in was removed, and the prison clothing substituted. As a consequence, on the release of all these men, fresh clothing had to be provided.
 1860 *Albany* (N.Y.). A considerable fire occurred here this year, of which we have not the details; but out of the "adjustments" consequent upon it arose the *Albany Rule* of apportionment, of the details of which we have spoken under FIRE INS. LOSSES, APPORTIONMENT OF. (1849, 1868.)
 " *Australia*. Early this year there were numerous fires in various parts of Australia, consequent, it was believed, on the great mercantile depression. The *Melbourne Argus* recommended Fire Inquests.
 " *Valparaiso*. Large fire; 50 or more houses destroyed. (1859, 1862.)
 1861 *Halifax* (Nova Scotia). Destructive fire, burning Exchange-rooms, Odd Fellows' Hall, American Consulate, etc.
 January *Blenheim Palace* (Woodstock). Titian Gallery (outside main building) destroyed.
 Feb. 5 *Portsmouth* (England). A fire of a remarkable character occurred. Mr. Cooke's equestrian company was performing there in a temporary building, chiefly of timber, consisting of the circus, stabling, etc. The stables took fire, and before any effective assistance could be given, were burned to the ground. A brewery and 9 or 10 adjoining houses were destroyed. Some 8 of the trained horses were burned. Their cries and moans were terrible. (1776, 1874.)
 Mar. 7 *Mendoza* (South America). A fire followed upon the great earthquake which destroyed the city, and about 600 persons were believed to have been "burned alive."
 May *Glaris* (Switzerland). 500 houses destroyed.
 " *Limoges* (France). Great fire; destroyed one quarter of town. (1789, 1864.)

1861
June 22

London. June 11. Surrey Music Hall destroyed. Plumbers.

London. Cotton's Wharf, Hay's Wharf, and Chamberlain's Wharf, etc., Tooley Street. This, commonly designated the "**Tooley Street Fire**," is entitled to rank as the second most destructive (if not otherwise largest) fire London has experienced. At the Great Fire of 1666 there were no fire ins. asso. to suffer. In the present case a loss of nearly £2,000,000 was to a very large extent covered by ins. The building in which the fire originated, and those to which it extended, were ranked as among the very best risks of their class, and it had been hoped they were in a large degree fire-resisting; but they speedily succumbed to the enormous heat resulting from the combustion of the merchandize they contained. Early in the progress of the fire Braidwood, the then Chief of the London Fire Engine Estab., lost his life, by the fall of a portion of one of the vast walls, produced by an explosion within. The fire continued to burn for the greater part of two days, and it was many weeks before it could be finally extinguished from the ruins. Large quantities of tallow were stored in the basement of these buildings. It melted and ran into the river through the sewers: much to the danger of the shipping. The circumstances arising from the unlawful appropriation of this tallow are stated under FIRE INS. SALVAGE.

The loss fell upon offices which could bear it; and no failure resulted. But the offices became greatly alarmed notwithstanding: for they stood at risk upon merchandize to be valued by tens of millions, much of it contained in wharves far inferior as regards construction to these. As a result, the rates for mercantile ins. were put up on the "panic" principle [FIRE INS. PREMS.]; while requirements were made regarding the classification and storage of merchandize, and the structural condition of buildings, which the wharfingers declared to be impractical of fulfilment. [FIRE PROTECTION.] What immediately followed is stated under FIRE INS., HIST. OF, at this date. The fire originated in the jute department. Its actual cause was never ascertained. The regulations enforced at the wharf in which the fire originated were very strict.

It is stated in Young's *Fires, Fire Engines*, etc., 1866 (p. 336), that this fire was prevented from spreading to Beale's Wharf, and so eastward, by the use of a small hand-pump. [FIRE ENGINES, HAND.]

In connexion with the events of this fire must be read, not without surprise, the following verses from a poem called *The Fire King*, which appeared in a paper called the *Town*, in 1839—six years after Braidwood's appointment as Chief of the London Fire Engine Estab.—and wherein the said Fire King expresses his wrath against the efficient chief in strong terms, as follows:

"I'll do for that Braidwood!" then said he,
"And the whole of the brigadier brood.
I'll make them respect my dignity,
As every fireman should.
I'll set the Thames on fire, and see
If he bilks me of my food."
Then away he tooted to Tooley Street,
And selected a warehouse of oil.
'Tis true he didn't admire the treat,
For he very much suffered from bile;
But a glass of turpentine taken neat
Soon settled his inward turmoil.
The Thames all over was in a flame,
As with lighted oil 'twas running.
To save the craft was each one's aim;
But his craft exceeded their cunning:
And the Fire King laughed when he found he could tame
The Fire Brigade with his funning.
When they threw the tide on the burning mass,
Quite fruitless was their desire;
And the bravest heart cried out, "Alas!"
As he shrank from the Fire King's ire.
Things were come, indeed, to a pretty pass,
When water wouldn't put out fire.

Those who remember the circumstances attending this fire in detail will be most struck by the coincidences embodied in these lines, which, having been prophetic, we now make historical.

July Boston (U.S.). Nickerson's wharf, salt-mills, warehouses, and ships. Damage about £200,000. (1860, 1872.)

Aug. 1 Horsleydown (London). Davis's Wharf (Messrs. Curling & Co.) burned. This fire looked particularly threatening at one period. The wharf had immense stores of combustible materials. The prompt attendance of the Brigade, still engaged in Tooley Street, near by, was of essential service. Loss £25,000.

- 1861**
 Aug. 12 *Rotherhithe* (London). Terrible conflagration, embracing a tanner's, a manufacturing chemist's, a barge-builder's, a ship-chandler's, and a sack-maker's premises, in the whole covering 2 acres. By the great exertions of the Fire Brigade the conflagration was limited to these. Loss very considerable.
- " 30 *London*. Upper East Smithfield. Extensive sugar works of Messrs. Harrison & Wilson, near the London Docks. The fire originated in the carelessness of a workman throwing a lot of loose paper down the well-hole of the lift. A portion of the paper became ignited at one of the gas-burners, and set the premises on fire almost momentarily. Many of the work-people—some partly naked, some quite—had the greatest difficulty to escape, and several lives were lost. Damage over £30,000.
- Sept. 4. *London*. Messrs. Knight, tallow-melters, Paternoster Row; Messrs. Longmans, publishers, etc. Damage £50,000 to £60,000.
- Oct. 5. *Edinburgh*. The extensive works of Messrs. Laidlaw & Son, brass-founders, etc. The models of 40 years' accumulation burned. Loss considerable. (1857, 1865.)
- Nov. 28 *Pimlico* (London). The extensive premises of Messrs. Holland & Sons, cabinet-makers and upholsterers. Tremendous conflagration.
- Dec. 2 *Antwerp*. Belgian sugar refinery and much other property destroyed; and some lives. Damage about £120,000. (1858, 1866.)
- " 12 *Charleston* (S. Carolina). A considerable portion of the city destroyed. Damage estimated at nearly £2,000,000. Much of the property was uninsured, the Fire Cos. of the Northern States, as also the Brit. Offices, having closed their agencies early in the year, in consequence of the war. (1868.)
- " 22 *Nashville* (Tennessee). Large fire. Loss about £160,000. The same remark as in the case of Charleston will apply.
- There were other serious fires in the Southern States about this period, as at *Richmond*, *New Orleans*, *Montgomery*, *Greenville*, etc., of which we have no details. The loss during one month was estimated at little short of £2,000,000 stg.
- Cotton Mills*. In the early months of this year, a number of fires occurred in cotton mills in *Manchester*, *Preston*, and other parts of Lancashire.
- Note*.—There were a large number of suspicious fires in *Ireland* this year. Fires from "paraffin" also became very prevalent in the U.K.
- 1862**
 Mar. 23 *Kensington* (London). **Campden House**. This mansion, consisting of 30 rooms and a private theatre, was at the time of the fire understood to be filled with furniture, carved work, pictures, and other works of art of rare value. Its hist. is a remarkable one. It was orig. the residence of Baptist Hickee, a wealthy silk mercer in Cheapside, who was created by James I. Viscount Campden. He built it about 1612. The 3rd Viscount Campden, on the occasion of the Restoration, entertained Charles II. at supper, when doubtless the walls now laid in ruins echoed with kingly wit and courtly laughter. In the next generation, the mansion was let to Princess (afterwards Queen) Anne, who resided here with her husband, Prince George of Denmark. In the present generation it again became noted, as the residence of Col. Waugh, of "Eastern Bank" fame. Later, it became famous by reason of the many performances of the Campden Amateur Theatricals for charitable objects. The house and its contents at the time of the fire was insured by its last proprietor, Mr. Woolley, for £29,000, of which £15,000 was in the *Sun*. This Co. resisted payment, and was sued under its pol. [*Woolley v. Pole*, 1863.] The defence was fraud and arson. The trial, which excited the most intense interest, lasted many days, and in the end—although quite enough transpired to justify the office in its doubts—resulted in a verdict for the plt. for the amount claimed.
- " 29 *Kingston* (Jamaica). Great destruction of property; 3 lives. Damage £250,000, only a small portion insured. (1782, 1866.)
- April 4 *Valparaiso*. Most destructive fire. (1860, 1864.)
- " 12 *Falmouth* (Cornwall). Some 15 or 16 houses in the High Street, and many others in the rear, burned. (1792, 1870.)
- May 7 *Enschede* (Holland). "The Manchester of the Netherlands." This town was entirely destroyed, it was believed by an incendiary. It contained upwards of 1000 houses and many manufacturing and public buildings.
- " 10 *Troy* (State of New York). A considerable part of the city burned. Fire commenced on timber railway bridge. British offices largely interested.
- " *New York*. Great petroleum stores. (1860, 1863.)
- June 7 *Quebec*. The St. Louis suburbs. 120 houses destroyed. (1854, 1865.)
- " 10 *St. Petersburg* (Russia). Property destroyed valued at £1,000,000; only partly covered by ins. (1837, 1876.)
- July 5 *Marseilles* (France). Great destruction.

- 1862**
July 13 *Lambeth* (London). Lambeth House (Messrs. Harveys, drapers and upholsterers, Messrs. Goatley & Co., oilcloth manufacturers, etc.), covering several acres. Loss about £150,000. The Duke of Sutherland worked very zealously at this fire, and was of essential service.
 „ *Bordeaux* (France). The Hotel-de-Ville; great destruction of works of art. (1866.)
Aug. *Lyons* (France). Considerable destruction of property.
Sept. 3 *Ratcliffe Cross* (London). Eagle Wharf, extensive stores of Messrs. Ritchie & Sons, and flour-mills of Messrs. Hammond & Co. Great destruction.
 „ **8** *Liverpool*. Brownlow Hill Workhouse; 21 children and 2 nurses lost their lives. (1860, 1863.)
 „ **13** *Deptford* (Kent). Surrey Consumers Gas Co.'s Works. A large gas-holder containing 10,000 cubic ft. of gas became ignited, but did not explode. The fire was limited to the works. (1841.)
Nov. 13 *Toronto* (Canada). The Rossin House Hotel; a monster building, very largely insured in British offices. (1849.)
 „ **19** *Grantham* (Lincolnshire). The Exchange and other property destroyed.
 „ **20** *Blackfriars*. Messrs. Price's oil-mills burned; great destruction of property. There was a fear of the flames extending to the City Gas Works. (1845.)
Dec. 30 *Chester*. The Exchange and Town Hall of this ancient city were burned. They formed a spacious pile of buildings, erected during the years 1695-8, and embellished during the mayoralty of the Earl of Derby in 1702. The building also embodied the Recorder's Court. Many portraits of local celebrities and benefactors to the charities of the city were destroyed.
1862 *Constantinople*. Many hundreds of houses and shops burned. The Sultan was present, and took part in the extinction of this fire. (1859, 1864.)
Note.—The great feature of this year was the number of alarming fires in *Russia*. They were attributed to incendiarism; and were said to cause great anxiety to the Emperor, who was personally present at several.
1863
Jan. 6 *Plymouth* (England). The fine block of buildings known as the Royal Hotel, Assembly Rooms, and Theatre, burned. Loss £50,000. (1836, 1866.)
 „ *Aspinwall* (New Granada). Panama Railway Depot, Aspinwall House, and several large hotels burned.
April 18 *London*. The premises of Messrs. Capel, coopers, Seething Lane, burned; great destruction of property. The house was said to have been formerly the residence of one of our princes.
 „ *Jackson Town* (Australia). Large number of stores, hotels, banks, private houses, and other buildings destroyed.
May 8 *Damerham* (Hants). One of the prettiest villages in the South of England; 27 houses, in addition to farm buildings, etc., burned. Children playing with matches.
June 24 *Greenock* (Scotland). Messrs. John Walker & Co.'s sugar refinery. £40,000.
July 3 *Liverpool*. Building containing 3000 bales of cotton; all burned. Loss about £120,000. (1862, 1864.)
13 to 15 *New York*. Large number of fires caused by rioters. Loss about £100,000. (1862, 1865.)
Aug. 14 *Monastir* (European Turkey). There were burned 2300 shops, 240 houses, 46 khans, 3 mosques, 6 synagogues, 2 baths, 2 military guard-houses, 5 bridges, and the clock tower.
Sept. *Toulon* (France). Forest fire, extending over some 10 square miles; great destruction of timber, etc. The fire was stopped by a storm which carried it in the direction of the sea.
Nov. 1 *Antigua* (West Indies). Destructive fire, occasioned by rum igniting while being drawn from the puncheon.
 „ **19** *Lisbon* (Portugal). Great destruction of property, including Bank of Portugal, Town Hall, Tobacco Contract Office, Fid. Ins. Office, and about 50 residences. (1836.)
Dec. 8 *Santiago* (Chili). The interior of the Jesuit Church, La Compania, was set on fire by contact of a curtain with flame. It was during the feast in honour of the Immaculate Conception. The interior of the building and the roof being constructed of timber, the fire spread with great rapidity. There was but one exit. Upwards of 2000 persons, mostly women and children—whose dresses communicated the fire—and representing the youth, beauty and fashion of the city, perished; 161 waggon-loads of corpses were taken from the ruins.
 „ **19** *London*. Milk Street and Wood Street; Messrs. Grant's and other ware-houses destroyed. Loss £100,000.
1863 *Rotterdam*. The Museum destroyed.
Note.—During this year a series of fires in connexion with agricultural risks occurred in the Yorkshire Wolds and in North Lincolnshire. The

- value of grain and property destroyed was, at its lowest estimate, £30,000. These fires were believed to have been produced by incendiaries known as the "Wold Rangers."
- 1864**
 Jan. 15 *Liverpool*. Explosion on *Lottie Sleigh*. [EXPLOSIONS, sub-heading *Gunpowder*.] (1863, 1866.)
 Feb. 13 *Chambrey* (Savoy). Theatre and Town Hall destroyed.
 March *Dublin*. Fire at Apothecaries' Hall. (1860, 1875.)
 April 3 *Georgetown* (Demerara). Great destruction of property; nearly half the town burned. Loss estimated at £600,000. British offices largely interested. (See July this year.)
 " 10 *Brisbane* (Queensland). 14 shops and large amount of property destroyed.
 June 6 *Manila* (Philippines). Great quantities of tobacco burned in the Gov. stores. (1833, 1865.)
 " 7 *Dock Head* (London). Meriton's Wharf (Messrs. Barry) burned; great destruction of property. (See Nov. 25, Sufferance Wharf.)
 " 16 *Nijni-Novgorod* (Russia). Large amount of property destroyed; 148 houses and 1500 booths at the fair.
 July 5 *Georgetown* (Demerara). Another considerable fire, destroying about half the remaining portion of the town. Loss about £300,000, some half of which was insured, largely in British offices. Steam fire engines were soon afterwards ordered from England.
 Aug. *Hull* (Yorkshire). Goods Station, N.-E. Railway, and stores. Loss £50,000.
 Sept. 19 *London*. Haberdashers' Hall (1666) and Messrs. Tapling's carpet warehouses. Total loss £180,000.
 Oct. 10 *Lisieux* (Normandy). Cloth factory and wool stores. Loss £40,000.
 Nov. 25 *Dock Head* (London). Messrs. Barry's Sufferance Wharf burned. Loss £150,000.
 The ins. offices refused to pay the claims arising, on the ground of irregularities in the books of the firm, and finally instituted criminal proceedings against the Messrs. Barry and three of their servants. In the first instance, the charges were in respect of the claim for fire at Meriton's Wharf. But they were finally tried on a charge of conspiring to defraud the ins. offices in regard to the stock claimed for after the fire at Sufferance Wharf. There certainly had been irregularities in the stock books, and these required investigation. The Judge said there was no charge to go to the jury; no one who knew the Messrs. Barry could believe the irregularities to have resulted from any act of their own. They prob. were the victims in every sense of the word. (1820.)
 Dec. 11 *Constantinople*. The Palace of the Grand Vizier destroyed. (1862, 1865.)
 1864 *Hankow* (China). 1500 houses and a great quantity of property destroyed.
 " *Philadelphia* (U.S.). Great petroleum fire; enormous destruction. (1850, 1869.)
 " *Valparaiso*. Another considerable fire occurred in this city. (1862.)
 " *Limoges* (France). There appears to have been a fire in this town again this year, for the bishop of the place addressed a letter to the ecclesiastics of his diocese on the subject of "the late fire," wherein he says the pop. were praying fervently in the Church of St. Michael, when several persons reminded the priests in attendance that in 1789 a similar disaster was miraculously put an end to by the protection of St. Martial, St. Aurelian, and St. Agatha, after their relics had been carried about with great pomp. Excited by such a glorious example, he could not refuse to try a similar proceeding, and he had the satisfaction, as the long religious *cortège* advanced, to find that the high wind subsided, and that the fire engines arrived from the neighbouring towns, and the intensity of the flames diminished; in addition no lives were lost. For such mercies the letter recommended humble prayer and thanksgiving. It is possible the letter refers to the fire of 1861; but there considerable damage was done. (1861.)
 " *Russia*. The fires here were again one of the great features of the year. We present the best summary we can between the end of April and the middle of Sept.: *Kalouga*, 54 houses; *Okhansk*, 204 houses; *Scrapoul*, great damage; *Serdobsk*, four-fifths of town destroyed; *Mosir*, one-half the houses; *Mologa*, 200 houses. Then *Nijni-Novgorod* (see June above). At *Patrofsk*, 6 fires in June and great part of town burned, powder magazines of Kazan and Okhta blown up; *Riga*, 2 fires; *Tunien*, 2 fires, best part of town burned; *Orenburg*, 600 houses; *St. Petersburg*, 4 conflagrations; *Simbrisk*, reduced to ruins; *Yaroslavi*, the same; *Serponkhoff*, slightly burned. Two imperial cannon foundries laid waste.
 " *Dunedin* (New Zealand). Loss £40,000, falling on Brit. and Colonial offices.
 Note.—There was some return of the incendiary fires of the "Wold Rangers," referred to in our note of last year. Happily they were speedily stopped. The fires in the U.S. this year were unusually numerous, and disastrous in character. [FIRES AND FIRE INS., STATISTICS OF.]

- 1865
Jan. 13 *Edinburgh*. Theatre Royal burned. Dean of Gild and 7 other persons killed by fall of wall. (1861, 1875.)
Feb. 20 *Constantinople*. Roman Catholic Convent at Galata; buildings burned; about 100 persons killed by fall of the walls. (1864, 1865.)
" 23 *London*. Saville House, Leicester Square, "where George III. was born," burned to the ground. The accident began in an escape and explosion of gas. The destruction was speedy. The Fire Brigade arrived promptly, and very soon afterwards—properly enough, having regard to Royal associations—the Prince of Wales, accompanied by the Duke of Sutherland, Lord Richard Grosvenor, and several gentlemen of the suite. The Prince was attired partly in the dress of a fireman, and received the cheers of the crowd. The fire spread, and the north side of the Square was in danger. The Prince and the Fire Brigade worked with vigour, and success so far as preventing the extension of the fire. A large mass of the cornice fell and seriously injured two of the firemen. The jets of gas were burning in the ruins and supplied an important aid to the combustion. The *Ann. Regis.* for this year supplies some add. information regarding the hist. of this building:
One of the old historical landmarks of Lond. was totally destroyed in a few hours by fire. Saville House was that mansion of Sir Geo. Saville which was attacked and gutted by the No-Popery mob in the time of the famous Gordon riots in 1780. It underwent many changes of fortune since the days when Leicester Fields retained some slight agrarian character, and were resorted to by duellists who encountered one another with swords, as Chalk Farm became afterwards the place of similar meetings when pistols had come to be "the weapons of gentlemen." Most Londoners who have arrived at middle age remember the Linwood Gallery—a collection of worsted work, embroidered by Miss Linwood. It is impossible to say what the house has been in later days. At one period it was a *Salle d'Armes*, where fencing, boxing, wrestling, and feats of strength and dextrous swordsmanship attracted crowds. Billiards have had their day here also; and suppers, singing, and music have attracted many. A bank had latterly estab. itself in connexion with the premises, and this, too, almost wholly fell a prey to the flames. . . .
" 23 *Port-au-Prince* (Hayti). Most destructive fire; more than 600 houses burned, and much produce; damage estimated at £500,000. Caused by negligence of lamp trimmer. (1820, 1866.)
April 16 *New York*. South Street, Free and Bonded Warehouses. The value of the merchandise in the warehouses at the time of the fire was found to be £371,779, while the total ins. was found to be £425,507. The salvage was very considerable. The circumstances attending the fire were investigated, without any very satisfactory results. The apportionment of the interest in the salvage occupied time; and actions were brought by the owners of the warehouses against the ins. offices for expense of removing salvage. [SALVAGE, FIRE.] (1863, 1865.)
May 27 *Svetenham* (Cheshire). Damage £40,000.
June 22 *Quebec* (Canada). More than 100 houses burned; chiefly poor people. (1862, 1866.)
" 24 *London*. Holborn. Messrs. Meeking & Co., drapers, etc. Damage £30,000.
" 29 *London*. Messrs. Sotheby & Co., trade auctioneers; valuable library burned.
" 29 *Sydney* (N. S. Wales). The Roman Catholic Cathedral burned.
July 4 *London*. Marlborough House, residence of Prince of Wales; mainly extinguished by the exertions of the Prince, who, trusting to lath and plaster, fell partly through the ceiling.
" 10 *London*. *British Museum*; the binders' rooms; several valuable manuscripts destroyed.
" 13 *New York*. *Barnum's Museum* burned down. (1865, 1867.)
July *Cassaba* (Asia Minor). Half the town destroyed.
Sept. 6 *Constantinople*. A fire originated in a small 2-story building, and thence spreading, whole streets, squares, and mosques were destroyed, as well as the Gov. buildings. Some 8000 houses and 20 mosques were burned, and 22,000 people left without homes. (1865, 1866.)
" 18 *Kensal Green Cemetery* (London). Fire in catacombs destroyed several coffins. Cause not ascertained.
Oct. 5 *Stamboul* (Constantinople). Many hundreds of houses burned; some close adjoining to the district burned in Sept.
" 30 *London*. Beale's Wharf, Tooley Street; about 1,500,000 lbs. of tea were destroyed. Damage £150,000.
1865 *Carlstad* (Sweden). Town entirely destroyed, except the bishop's palace, the hospital, and the gaol. (1752.)
" *Manila* (Philippines). Two fires; about 6000 houses and huts destroyed in the town and neighbouring villages. (1864, 1870.)
" *Port Elizabeth* (South Africa). Extensive fire in Main Street; large amount of property damaged. Brit. offices interested. (1857.)
Note.—Incendiary fires prevailed in *Russia* largely again this year. They were frequently preceded by demands for money. The Poles were

- suspected. Suspicious burning of farming stock in the northern counties of England also continued—see *Post Mag.* 28 Oct. this year.
- 1866**
Jan. 1 *London.* St. Katharine's Docks. Stack F., containing spirits, tallow, palm-oil, cotton, flax, jute, and other merchandize to the estimated value of over £2,000,000. The fire originated among the jute. It soon extended to stack H., the doors connecting the two being opened for the use of the workmen. Attempts were made to close them, but failed. The fire was confined to the upper floors. Loss £200,000. This was the first day of the Fire Brigade being under the charge of the Metropolitan Board of Works, with Captain Shaw still at its head, and it never rendered more important services. It was stated that at this fire the greatest force of steam fire engines ever brought to bear on one emergency was employed. (1858.)
- Feb. 21** *London.* Oxford Street; Messrs. Laurie & Marnier, coach-builders, burned.
- Mar. 16** *London.* Lower East Smithfield; Messrs. Watson & Burr's warehouses; jute, etc. Loss £50,000.
- „ 16 *Kennington Lane (London).* Messrs. Rolls & Son's floorcloth factory. Loss £30,000.
- „ 19 *Port-au-Prince (Hayti).* More than 1000 houses destroyed, many of them those of foreign merchants. The loss immense. (1865, 1875.)
- April 27** *London.* East and West India Docks; jute shed new and very spacious. Loss £40,000.
- May 5** *Glasgow.* Messrs. Scott, Inglis & Co.'s works, Bridgeton. £80,000 or upwards. (1858, 1867.)
- „ 23 *Manchester.* Goods Station of London & N. Western and Gt. Western Rys., Deansgate. Estimated loss £300,000. (1860, 1866.)
- „ 25 *Ottery St. Mary (Devon).* 111 houses and cottages burned. Loss £20,000.
- „ *Leeds (Yorkshire).* During this month several important woollen mill fires occurred in this district.
- „ *Constantinople.* Large fire. (1865, 1870.)
- June 24** *Newcastle-upon-Tyne.* Messrs. Brown & Co.'s flour-mill, with stock, machinery, etc. Loss £70,000. (1854, 1867.)
- „ *Bordeaux (France).* Fire in mercantile warehouses; damage estimated at £120,000. (1862, 1869.)
- July 4** *Portland (Maine).* A cracker thrown by a boy during the celebration of Independence Day led to the destruction of nearly all the business portion of the city, including 8 churches, the banks, newspaper offices, etc. More than 2000 families homeless. Damage £2,000,000.
- „ 29 *Birmingham.* Britannia carriage works; fire speedily extinguished. Loss £10,000.
- „ 31 *Manchester.* Messrs. Butterworth & Co.'s cotton waste warehouse. Damage £30,000 to £40,000. (1866, 1873.)
- „ *New Zealand.* Great fire, of which we have no details.
- Aug. 13** *Plymouth.* Large tannery works on Tavistock Road. Loss £20,000. (1863, 1868.)
- „ 17 *Quebec.* Considerable fire, attributed to Fenian emissaries. (1865, 1866.)
- „ 19 *Jersey City (New York).* Great petroleum fire, 50,000 barrels; tobacco, cotton, sugar, and produce generally; 13 lighters, several tugs, canal boats, schooners, steamers, trains laden with freight, 3 docks and other buildings. Damage £400,000.
- „ 19 *Chicago.* Van Horne, Murray & Co., tobacco merchants, and many other buildings. Total loss £100,000; ins. £60,000. (1860, 1870.)
- „ 26 *Bloomsbury (London).* Messrs. Holland & Hannen, builders, Duke Street. Loss large.
- „ 27 *Dardanelle (Turkey).* 441 houses and 139 shops destroyed; poor district.
- Aug.** *Antwerp.* Great petroleum fire. Loss from £200,000 to £300,000. British offices largely interested. (1861, 1870.) Regarding this fire Prof. Lyon Playfair said before the Select Parl. Committee on Fire Protection, 1867:
2958. . . . The danger is that when an oil warehouse is set on fire (which remark also applies to less dangerous oils), water will not put them out, but they run about flaming and form great extensions around the source of the fire. For example, at Antwerp, in Aug. 1866, a fire commenced in some vaults where petroleum was stored, and the fire passed to other warehouses having petroleum in them, and these after a time exploded; then the fire ran into the sewers, where it mixed with the air, and exploded under the houses and set them on fire. 2959. But was that on account of the bad quality of the petroleum?—I do not know; any burning oil in a similar temperature would probably have produced the same result; the origin of the fire was not known, but safe oils would have rendered it difficult to commence the fire. [Oils.]
- Sept. 11** *London.* Depot of Lond. & North-Western Railway, and other warehouses, Haydon Square, Minories. Damage £135,000.
- Oct. 16** *Quebec.* Enormous fire; 2500 houses, and 17 convents and churches burned; many of the houses of a poor character. Loss estimated at £600,000.

- 1866** No less than 18,000 people were deprived of their homes; tents were provided for 10,000. There was a suspicion that this fire was caused by Fenian emissaries. (1866, 1870.)
- Oct. 29 *Kingston* (Jamaica). Great fire; Treasury, Post Office, Colonial Secretary's Office, etc.; in all 35 large buildings. Loss £40,000. (1862.)
- Nov. 30 *Yokohama* (Japan). Tremendous conflagration in the European quarter. The ruins covered about 50 acres. Loss nearly £500,000, of which £163,000 was stated to be insured in the U.K., and about £70,000 in China.
- Nov. *Preston* (Lancashire). During this month several large fires occurred, mostly in cotton-mills. Enormous loss. (1875.)
- Dec. 30 *Crystal Palace* (Sydenham). The North Wing, or Tropical Department destroyed. This fire created a good deal of interest. To a stranger, a building composed mainly of brick, iron, and glass, did not seem at all calculated to burn. The floor was, indeed, of wood, but a good deal of it had been removed to make way for the ferns, palms, conifers, and other plants of tropical character. The fire unquestionably broke out in the paint store in the north-east corner of the building. It occurred too on the Sunday, when only one of the three watchmen was on duty, or its more timely discovery would most prob. have limited the damage greatly. The space ravaged by the fire extended over some 2 acres. After it had done its work, all that remained of the northern transept were a few broken outlines of the arches. Towering from among the general wreck were still to be seen the two colossal Egyptian figures (65 ft. high) copied from the Temple of Rameses the Gt., at Abou Simbel, in Nubia; but now sadly defaced by the action of the fire. Of the Alhambra Court, as also of the Byzantine and Romanesque Court opposite, little was left but the bare walls. The Queen's apartments and the Library and Reading Room perished; as also the extensive collection of Indian curiosities and products; the gallery of naval architecture; the aviary; and the whole of the plants, including the bark of the "big tree" (the *Wellingtonia Gigantea*) brought from the Sierra Nevada of California, where we have ourselves seen many such still standing, some 400 ft. high. The destruction of this portion of the building was regarded as a national loss.
- The amount of damage was estimated at from £50,000 to £60,000. The entire ins. upon the building and contents amounted to £96,000. The claim in respect of the portion now damaged was understood to be £38,000.
- The Crystal Palace Co. has since experienced some difficulty in regard to its ins. See FIRE INS. PREMS., 1873.
- Dec. *Liverpool*. Compton House; Jeffrey's large drapery estab. Loss £200,000. (1864, 1867.) The late Mr. P. M. Dove, in giving evidence before the Parl. Committee on Fire Protection in 1867, said regarding this fire:
- The lives of considerably more than 100 persons were endangered, living on the premises, and from the first strong suspicion existed that it was caused by incendiarism; but no proper inquiries could be instituted, and the matter was allowed to die out, until a few months afterwards a youth was taken up for robbing the premises, and he confessed that he had fired them. Mr. Jeffreys, the proprietor, told me that within 2 or 3 days of the fire, to use his own expression, he "spotted this individual," but he had not sufficient evidence to enable him to take any steps in the matter; therefore if it had not been for the young man confessing it, it would never have been found out. . . . It is a difficult thing to account for it; he himself said that it was an unaccountable impulse; that he was going downstairs with a light, and that he threw the light among the papers; but you can hardly credit that statement. (Q. 2476-7.)
- 1867**
- April *St. Louis* (U.S.). The Linnell Hotel, one of the largest in the U.S., having 530 rooms elegantly furnished, burned. Loss £300,000. (1859, 1870.)
- July 3 *Farington* (near Preston). Messrs. Wm. Bashall & Co.'s mills. Loss £150,000.
- " 3 *Basseterre* (St. Kitts, W. Indies). About 1000 houses, or in fact the whole town, except the Gov. buildings and some 6 houses, burned. Supposed to be incendiary. Loss £200,000. Ins. in British offices small.
- " 14 *Liverpool*. Hanover St., premises of Messrs. Evans & Son, wholesale chemists, etc. Damage very considerable. (1866, 1869.)
- Aug. 1 *Glasgow*. Mitchell Street, Messrs. John McFarlane & Co., calenderers and hot-pressers; and other properties. Loss £100,000. (1866, 1870.)
- " 2 *London*. Messrs. Lamb & Sterry's paraffin refinery, etc., Old Kent Road. Loss £100,000.
- " 18 *Oldham*. The cotton mills of Mr. Robert Fitton, Turf Lane, 50,000 spindles, burned. Loss £40,000.
- " *Johanngegerstad* (Saxony). Some 350 dwellings burned and 3 lives lost.
- " *Petrolia* (Canada). This heart of "Canadian Oildom" was entirely burned. Loss of oil prodigious.
- Sept. 12 *Bermondsey* (London). 16 or 17 houses destroyed.

- 1867**
 Sept. 24 *New York*. Tomkins Street, Messrs. E. White & Co.'s planing mills, and many other properties. Loss £40,000. (1865, 1872).
 Oct. *Lozoo* (Switzerland). About 160 dwellings burned. Loss £60,000.
 Nov. 14 *London*. Imperial Gas Works, King's Cross. Gas-tar well on fire; great risk of explosion; avoided by emptying gas-holders, and other wise precautions.
 „ 28 *Hong Kong* (China). Great fire; chiefly among the Chinese Hongs. Damage estimated at £150,000. (1851.)
 Dec. 12 *Dundee* (Scotland). Considerable fire; jute. (1855, 1870.)
 „ 20 *Newcastle-upon-Tyne*. Messrs. Bell & Dunn, shipbuilders, and several warehouses. Loss £40,000 to £50,000. (1866.)
1868
 Jan. 9 *Milkhall* (London). Messrs. Pontifex & Wood's large manufacturing premises; white lead, oil, turpentine, etc.
 Feb. 11 *London*. Oxford Music Hall, Oxford Street, partially destroyed. (1872.)
 „ 23 *Marylebone* (London). About 30 shops burned in Portland Market.
 April 2 *Bolton* (Lancashire). The Gilmour cotton-spinning mills. Loss £70,000.
 Aug. 10 *London*. Messrs. Hubbard & Stutter's hop warehouses and many small houses destroyed.
 Sept. 3 *Bermondsey* (London). Messrs. Darnell's granaries and wharves. Loss £50,000.
 „ 4 *Southampton*. Premises of Royal Mail Steamship Co., Southampton Docks. Loss £40,000.
 Sept. *Dunkirk* (France). Store-house of the Hull Steam Navigation Co. Loss about £80,000. Supposed to have been occasioned by spontaneous ignition of Russian flax.
 Oct. 28 *Plymouth* (England). Works of Plymouth Foundry Co. Loss £40,000. (1866.)
 „ 30 *Sloke-on-Trent* (Staffordshire). Repairing shops and store sheds of the North Staffordshire Railway Co. No ins.
 Dec. 7 *Timaru* (New Zealand). The town nearly destroyed.
 1868 *Albany* (N.Y.). Great damage; estimated loss £600,000. (1860.)
 „ *Charleston* (S. Carolina). Considerable destruction; damage £600,000. (1861.)
1869
 Jan. 23 *Liverpool*. St. Joseph's Catholic Chapel; 15 lives lost. (1867, 1874.)
 Jau. 28 *Hull*. Messrs. Hodge & Co.'s seed warehouse and crushing mill; very extensive. Loss £40,000. Cause of fire not known.
 Mar. 14 *London*. Adelaide Rooms, Strand, burned.
 April 11 *Southwark* (London). Extensive hop warehouses of Mr. Fritz. Loss £50,000, covered by ins.
 Aug. 4 *Philadelphia*. The great whisky fire at the bonded stores on the Delaware River, known as Patterson's Stores. They contained at the time of the fire over 25,000 barrels of whisky, chiefly rye, which was being ripened by age and various forcing processes. One of these processes was the keeping the barrels in an elevated temperature with their bungs out. Much of this whisky had by this means, and by age, been increased in price from 3 dols. to 15 dols. per gallon. The price of the raw spirit is about 1.50 dol. The cause of the fire is unknown; but as one entire end wall of the warehouses was blown out by explosion, it is clear that the fire either originated in the explosion, or was followed by it very speedily. The exposed end of the building was soon wrapped in flames. The fire spread rapidly in all directions, the burning whisky running in streams and adding to its intensity. The firemen were quickly on duty, but could do nothing. The burning whisky filled all the streets and kennels and sewers in the neighbourhood, ran down the hill into the harbour, endangered the shipping, filled that quarter with suffocating smoke, and made a flame that could be seen for many miles. Vast crowds of people poured into the streets in that portion of the city, and the sight was one of surpassing grandeur. Such a lavish flow of whisky, as might be supposed, produced the usual consequences. Hundreds could be seen scooping it up out of the kennels, and many became incapably drunk. All the groggeries near managed to obtain a full supply. Casks were rolled everywhere, stove in, carried off, burnt, or blown up. The whisky smell pervaded the entire city, and enough was destroyed during the night to cause an increase of 30c. in the price of the article next day. The fire burnt all night, but the surrounding buildings received but small injury. About midnight a terrific thunder-shower, with torrents of rain and myriads of hailstones, passed over the city, and did more to quench the flames than the exertions of the firemen. The torrents lasted an hour; the buildings fell, and at last the fire was checked. It continued to burn long afterwards, but not in a way to cause apprehension of danger in the neighbourhood. The loss was stated to be over £700,000, and the amount of ins. nearly £500,000, held by about 100 cos. About one-third of the entire loss fell upon 5 British offices, notably upon the *Imperial*, through an error of judgment on the part of its then man. in the U.S. Very few of the U.S. fire offices stood

- 1869 upon more than £4000. The *Times* correspondent said: "So great a fire, accompanied by so many thrilling scenes, has not been witnessed in this country for years." (1864.)
- Aug. 20 *Millwall* (London). The extensive ship-building yard of Messrs. Dudgeon.
- Sept. 29 *Paris*. The Hippodrome and many adjoining buildings burned. (1858.)
- " 29 *Bordeaux*. Great petroleum fire, commenced by explosion on board a lighter, and communicated to a number of other vessels by means of the burning petroleum floating up and down the river with the tide. Damage light compared with the enormous mass of property at risk. (1866.)
- Oct. 1 *Bayswater* (London). Moscow Road. Explosion of fireworks; 7 persons killed. [FIREWORKS.]
- Dec. 31 *Blackfriars* (London). Blackfriars Bonded Wharf, occupied by Messrs. Reid, brewers, the Patent Manure Co., and others. Destruction very considerable.
- 1870
- Jan. 12 *Richmond* (Surrey). Old Star and Garter Hotel destroyed; the manager burned.
- Feb. 6 *Havelberg* (near Berlin). 298 houses destroyed.
- March 9 *Lambeth* (London). The newly-erected manufactory of Messrs. Day & Martin, at Nine Elms, and other manufacturing premises.
- April 9 *Nottingham*. The lace manufactory of Messrs. Thomas Adams & Co. Loss £30,000.
- " 27 *Broadclist* (Devon). About 100 houses, nearly half the village, burned.
- " 27 *Egypt*. The new and beautiful Palace of the Viceroy at Ramle. The building cost £300,000.
- April *Manila* (Philippine Islands). Most extensive fire. (1865.)
- May 4 *Hull*. Great conflagration in Sisson's saw-mill, and adjoining timber-yards. Loss £30,000.
- " 8 *Elbowf* (France). Great conflagration. Loss estimated at £120,000.
- " 24 *Quebec*. In the St. Roche suburb; more than 500 houses of the poorer class, besides other property, burned. Loss £60,000. (1866, 1876.)
- " 24 *St. Louis* (U.S.). Very serious conflagration, *Missouri Republican* office, and other buildings. (1867.)
- " 27 *Constantinople*. Some 50 houses burned. (1866, 1870.)
- May *Antwerp*. Great conflagration at steam distillery and spirit stores. (1866.)
- June 4 *Bridgeton* (near Glasgow). The muslin manufactory of Messrs. Young, Strang & Co. burned. Loss £30,000. (1867, 1875.)
- " 5 *Constantinople*. The greater part of Pera was destroyed, including the English Embassy, the Portuguese and American Consulates, the Palace of the Armenian Patriarch, many churches, mosques, and several thousand [the *Levant Herald* said 7000] houses. The *Journal Officiel* of Paris contained an account of this fire, from which we draw the following passages:
- ... This part of the town is situate above Galata, and terminates on the right on the Bosphorus at Findkii, and on the left at the Golden Horn, with the Arsenal, schools, and Admiralty barracks; and it comprises the principal shops, churches, hospitals, legations, consulates, and the splendid Palaces of the Embassies of France, England, Austria, and Russia, built on terraces, in the midst of magnificent gardens. The ravages of the fire were already great when the engines arrived from different points, and they completely baffled the exertions of the firemen, who laboured amidst a shower of burning flakes and torrents of molten metal. . . . The English Embassy, although quite isolated, protected by thick walls and iron shutters, and with a sloping roof of slate and lead, caught fire at the roof, and the flames almost immediately extended to the upper stories of the house. Following the noble example of their chief—Sir Henry Elliot, the British Ambassador—all the Sec. attachés, dragomans, interpreters, and other officers, regardless of their own personal properties, united their efforts to those of the officers and sailors of the war-ship stationed at the port, to place the archives and public documents in the Chancellory beyond the reach of danger. At the close of the day the whole of the building had been destroyed, and all the persons connected with the Embassy, exhausted with fatigue, their clothing hanging in shreds, and their hair and hands burned, were driven to seek shelter elsewhere. . . . It may be said that Pera no longer exists.
- The loss was prodigious; one estimate reaching £5,000,000. Three English offices—The *Sun*, *Imperial*, and *Royal*—were understood to be interested in this fire. Two Swiss offices suffered severely. (1870, 1872.)
- " 5 *Panama* (Central America). The Aspinwall Hotel, Bank of Panama, and other buildings destroyed. (1737, 1874.)
- " 9 *Falmouth* (Cornwall). A number of business residences burned; loss £30,000. (1862.)
- " 21 *Farnworth* (near Bolton, Lancashire). Messrs. J. Whittam & Son's cotton-mills, driving 28,000 spindles, burned. Loss £35,000, covered by ins. in 6 offices.
- June *Houses of Parliament* (Westminster). A fire in the clock tower, which, but for its speedy discovery, might have led to serious consequences. (1834.)
- " *France*. There were some serious forest fires in various parts of France this month.
- " *Canada*. Some large forest fires raging in district of Saguenay, and villages

- 1870 destroyed. Later in the season there were others at Ottawa and elsewhere in Canada.
- July 1 *St. George's-in-the-East* (London). Timber-yard of Mr. Sheffield, and stores in various arches of Blackwall Ry. burned. Railway damaged by fire and heat. Loss considerable.
- Aug. *Sam-Sun* (Turkey). About 2500 houses and shops burned.
- Sept. 4 *London*. Cecil House, Cecil Street (formerly the town residence of the Earls of Essex), burned. Valuable architectural works of Mr. G. G. Scott destroyed.
- " 4 *Chicago*. One of the finest squares of buildings in the city, known as "Drake block," burned. Loss £500,000. (1866, 1871.)
- " 14 *Dundee* (Scotland). Great conflagration at Gordon & Co.'s warehouses, Trades Lane; jute, flax, codilla, etc. Loss £40,000, covered by ins. Capt. Fyffe, chief of fire brigade, and others lost their lives. (1867.)
- Oct. *Cronstadt* (Russia). Over 60 houses and several public buildings and a church, with the Museum of Naval Models burned. Loss very considerable. (1791, 1874.)
- Dec. 27 *Cornwall* (Canada). The woollen mill burned, with new stock of machinery. Loss £60,000.
- Note.—In *England* this year there were numerous fires in forests, woods, and moors, arising from the great drought.
- 1871
- Jan. 9 *Lambeth* (London). The premises of Messrs. Younghusband, oil wharfingers, with damage to adjoining properties.
- " 23 *Whitehaven* (Cumberland). Chemical works of Messrs. J. Bowes & Co. Considerable destruction.
- Mar. 26 *Chelmsa* (London). A considerable fire.
- June 17 *Sheffield* (Yorks). A fire in the ground immediately beneath some considerable works in this town was discovered. These works had been built on a layer of shale, which extended down to a seam of coal. Extinguished with considerable trouble and expense. A similar fire occurred in *Nottingham* a few years since.
- Oct. 7 *London*. Gray's Inn Road. James Ford, a fireman, after rescuing 6 lives, lost his own, through defect of fire escape. This painful event has led to considerable improvements. [FIRE ESCAPES.]
- " 8 *Chicago*. Several large lumber-yards and blocks of buildings burned. Loss £50,000. It was the exhaustion consequent upon this fire which caused the fire department to be so unprepared for the great conflagration which so speedily followed. (1870, 1871.)
- " 9 **CHICAGO**. This fire, which commenced on Saturday evening, while one of the largest, was prob. also one of the most destructive which has occurred in the modern hist. of the world. It destroyed about 12,000 buildings, covering an area of nearly 5 sq. miles, or 2600 acres. These, with their contents, were valued at £33,000,000. The ins. in force on the property destroyed was £20,045,000. The adjusted losses under these ins. amounted to £19,310,743. The 6 Brit. offices interested paid £1,182,521; of these, the two principal were *Liverpool, London and Globe*, £654,136; the *North British and Mercantile*, £455,730. The *Aetna* of Hartford had adjusted losses for £820,000; the *Home* of N.Y. £614,278. Quite a number of local and other U.S. fire offices were ruined by this fire. [CHICAGO.] It was believed that a considerable loss of life resulted.

The circumstances attending this great conflagration are too fresh in the minds of the present generation to require to be re-written here. Besides, there exists for ready reference one of the most able and eloquent accounts ever written of any event, in the pages of the *Ins. Times* of N.Y. for this year. It is from the ready pen of Mr. Edgar A. Hewitt, of the *Chronicle*, who himself witnessed the burning. There are one or two passages which so fully coincide with phenomena remarked at other great fires that we reproduce them for permanent reference:

... Everything seemed to be incendiary. The awnings, signs, metal cornices, the timber in front of buildings in process of construction: the very *débris* along the streets, became the bridges over which the fire rushed to the consummation of its frightful victory. A man would remove his household goods or office furniture into the street. Instantly the fire, leaping a block or more to do it, would seize them and bear them blazing on its terrible wings to ignite some distant building. *The very air seemed inflammable.* Is there some peculiar chemical condition of the atmosphere, not fatal to the existence of animal life, under which combustion is almost supernaturally fierce, rapid, and complete? Any one who witnessed the progress of this fire can hardly doubt it. *It seemed as if the air itself burned.* So perfect was the combustion that the very smoke was consumed.

When the fire got among the brick and marble buildings on La Salle Street, it cavorted as if let loose for a holiday. It burned the brick and iron as if they had been chips. It burned the Joliet marble as if it had been shavings. It went through the blocks between Monroe and Randolph Streets like a red-hot iron through pasteboard. A tower of flame apparently hundreds of feet high would shoot up from the burning building, wavering

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and swaying in the air, as if an intelligent purpose was behind or within it, and it was debating where to strike. Then instantly, and as swift as the stroke of an avenging angel's wing, it would pounce upon a building, perhaps a block away, and wipe it out of existence as a wet sponge wipes out chalk marks from a slate. The *Merchants Ins. Co.'s* building, supposed to be fireproof, was literally eaten up by the fire. . . . The Chamber of Commerce, an isolated building, with exterior walls of Joliet marble, burned as if it had been a paper match-box. . . .

None but an eye-witness can form any idea of the power and fury of the fire among the frame structures of the north side; the flames issuing from the buildings on either side of the street would unite, and present a solid wall of fire, filling the broad avenues from side to side, and shooting upwards 200 ft. into the air. There was street after street successively filled with flame. Here and there some tall warehouse or elevator being enveloped by the fire, the large walls would topple and fall into the burning sea without giving an apparent sound. *All minor sounds were drowned in the continuous roar of the flames.* The heat was so intense that at a distance of 200 ft. from a burning building it was almost intolerable. Stone walls melted, and the very bricks were consumed. . . .

It will be remembered that a stiff gale was blowing from the S.W.

The cause of the fire has never been satisfactorily determined. The orig. theory of the kerosene lamp and the cow did not survive investigation. It was next alleged that incendiarism had a share in the work; and Southern malice, or the desperate views of the Ku-klux were hinted. These surmises created much excitement at the moment, but were probably all untrue. The chart of the burnt district indicates the exact point of commencement, and the subsequent natural course of the fire up to the lake shore. (1871, 1874.)

- Oct. 24 *London.* Thames Street; Nicholson's and other warehouses destroyed.
 Oct. *Manistre* (Michigan). Entire town of 200 houses and 6 mills burned; loss £250,000.
 Dec. 2 *Leith* (Scotland). Some 800 or 900 yards of the West Pier burned. The wood-work was being covered with pitch, when the vessel containing the boiling fluid boiled over and caused the fire.
 „ 3 *Warwick Castle.* A considerable portion of this fine old historic building burned. (1694.)
 „ 14 *Rotherhithe* (London). There occurred a fire at the "King and Queen" Wharf on the Thames, whereby grain to the value of about £150,000 was injured or destroyed. The damage would have been much greater but for the exertions of the Salvage Corps. Captain Shaw had no less than 180 of his Brigade present. In the adjustment of the resulting loss some important legal questions arose, which have already been referred to under AVERAGE POL. (*Fire*). More recently a decision has been pronounced; but as this again is under appeal, we must defer further remarks upon it. [GRAIN TRADE.] [WHARFINGERS.]

Note.—A distinct feature of this year was the prairie fires in the north-western portion of the U.S. Many towns of which we in Gt. Britain had never heard the names, but which constituted the nucleus of thriving agricultural centres—not to say of cities of mercantile importance—were wiped off the face of the country, almost every mark of their existence burned clean away. As to these fires, there was usually no warning of their approach: and if there had been, there was no certain escape. A lake, or an open field of newly tilled soil was the only hope. The fire came on the face of the wind, licked up everything combustible it met with—and flew on!

1872

- July *Constantinople.* About 1000 houses destroyed. (1870, 1873.)
 Aug. 25 *Leeds.* The goods depôt of the North-Eastern Railway burned. The warehouses were stored with merchandize. Loss very considerable.
 Sept. 2 *Canterbury Cathedral.* The roof of this noble Cathedral was set on fire by the overturning of a pot of burning charcoal used by the plumbers for repairing the leads. Considerable damage done, and at one period the entire building seemed in jeopardy. (1174, 1876.)
 Oct. 2 *Escorial* (Palace of the, Spain). This famed building was partly burned. The grand library was saved. Lightning.
 Nov. 1 *London.* Oxford Music Hall again destroyed. (1868.)
 „ 9 **BOSTON** (U.S.). The fire which broke out in this city, on the afternoon of the above day (Saturday), must be regarded as the third largest in modern hist. In less than 48 hours it reduced to ruins 748 houses, including many of the largest business blocks in the city, and covering some 60 acres. The old Post Office and old Trinity Church were the only public buildings burned. The fire originated in the engine-room in the basement of a large dry goods estab., and spread up the well-hole of the lift with great rapidity. There was nothing, however, to distinguish it in the first instance from any ordinary fire. The horses belonging to the Fire Department were suffering from an epidemic disease very general amongst horses at that time. The engines had therefore to be drawn by the firemen,

1872

and they were unusually slow in getting to work. By reason of this delay the fire had made some headway. Boston is one of the most substantially built cities in the U.S., brick and granite being generally employed. But the streets are narrow, and the lofty buildings were surmounted with mansard roofs. It was these roofs that in this instance conveyed the fire from house to house, out of the reach of protection from the engines.

The air was still when the fire commenced, but there was soon observed a rushing of the wind. Do not fires, by the combustion of the air, themselves tend to produce this very general feature in great fires? We take up at this point the account of an eye-witness :

As soon as the flames had got fairly under way, the air, which had been still before, began to move in swift currents up the narrow street towards the fire. Soon it was like a whirlwind. The whole city was lighted up; the glare of the flames overspread the church spires and the trees of the common, where great crowds of people gathered to watch the progress of the flames. The whole pop. of the city was aroused, and thousands of people assembled in the streets to witness the magnificent and appalling spectacle. The fire seemed fairly to run down Summer Street towards the walls, sweeping away the brick and wooden buildings in its path like so much stubble. . . . In Congress Street the great six-story granite wool-houses went down like cob-houses. . . . The flames swept down towards the bay in a great broad sheet. . . . The buildings on Summer, Franklin, and High Streets were nearly all new five and six-story granite warehouses, most of which had mansard-roofs and gave the flames an easy way from one to another. . . .

The fire having been got partially under control, again broke out with renewed fury, fed by the gas mains, through the pipes running into the burning buildings.

It was finally checked by the blowing down of numerous buildings in the line of its march. Out of this proceeding arose questions regarding the liability of the fire offices for the buildings so destroyed. The results have been stated under FIRE EXTINGUISHMENT, EXPENSES OF. [DESTRUCTION OF BUILDINGS TO STOP FIRE.]

The Ins. Commissioner of Massachusetts, writing of this fire in his Official Report for the year, says (p. xi.) :

It did not die out, as some have supposed and asserted, for want of material to burn; but by the heroic efforts of indomitable firemen, it was effectually conquered while yet there remained large and densely packed areas of combustible buildings, and more combustible merchandize, possessing immense values, within the very grasp of the destroyer.

The Gov. of Massachusetts officially reported that the value of property destroyed amounted to £15,000,000 stg. The President of the National Board of Fire Underwriters, N.Y. (Mr. Oakley), said in his Address of the following year, that the amount ascertained by the Commissioners appointed to inquire into the causes of the fire was £14,000,000; and that there was covered by ins. £13,218,816, viz. in Massachusetts Offices, £7,082,220; by Cos. of other States, £3,163,704; by Foreign Cos., £972,231. And that there would be paid of such ins. the following sums: By Cos. of other States and Foreign Cos., £4,099,068; by the Massachusetts Offices, £3,036,000; by Cos. of other States not paying in full, £240,000; total, £7,377,068. He added :

It is a remarkable fact that the merchants and property-holders of Boston, who will receive on their gross ins. 65·73 p.c., realized within £500,000 of the whole amount received by the people of Chicago, though according to the estimates in both cases, the loss in Chicago was £9,600,000 in excess of that of Boston. Of the Massachusetts Stock Cos. doing bus. in Nov. last, only 11 survived the catastrophe; and of the 15 Mut. Cos. doing bus. in Boston, 4 were rendered insolvent by the fire.

It will be seen from the foregoing that many of the smaller local fire offices were ruined by this conflagration, as were some of those of other States holding risks here. The British Cos., as in Chicago, paid up with the utmost promptness: following, indeed, in this the noble example of the leading American offices.

This disaster following so soon upon that of Chicago, not only occasioned a very general and healthy rise in the prems., but also drew much add. attention to the necessity of increased means of protection against fire. [FIRE PROTECTION.] (1861, 1873.)

Nov. 10

London. The City Flour Mills, Blackfriars. One of the largest buildings in the City, and the largest flour-mills in the world. There were 16 land steam fire engines and 4 steam floats, with about 200 firemen in attendance. Loss £100,000. The mill was so constructed that the fire should not spread from the floor in which it originated; but this was not realized in practice. Cause of fire unknown.

Dec. 10

New York. Part of Fifth Avenue Hotel burned. (1867, 1873.)

1873

Bermondsey. The extensive biscuit factories of Messrs. Peek, Frean & Co., Dock Head, burned. Loss prob. £100,000.

April 23

Manchester. Carriage works of the London and Lancashire Railway, Miles Platting, burned; 40 locomotive engines, and 130 carriages destroyed. Loss £80,000. (1866, 1873.)

" 27

- 1873**
May 30 *Boston* (U.S.). Another considerable fire, not far remote from that of the preceding year. Damage about £220,000. The Ins. Commissioner of Massachusetts, who saw the first outbreak of this fire, and watched the steps taken for its extinction, was clearly of opinion that the Fire Department was not in this case up to the mark. Vide his 18th Ann. Rep. p. xix. (1872, 1874.)
- June 9** *Alexandra Palace* (near London). Entirely destroyed. This spacious structure, erected at a cost, it was stated, of £500,000, in considerable part from the materials which formed the building of the International Exhibition in 1862, had been opened as a place of public entertainment on the 24 May preceding, and thus it had a short career of only 16 days. The work of destruction took place in broad daylight in the presence of many thousands of visitors. Its cause was the carelessness of workmen engaged on the great dome. A charcoal-brazier left while the men were at dinner threw out a small spark of red-hot coal, which falling in a crevice near the upper gallery on the outside dome, ignited the dry woodwork, and before effective help could be obtained (although the building abounded with hydrants) the work of destruction was certain. Many of the more valuable pictures and other works of art were removed before the fire could burn down to them. The loss was very considerable; and out of it arose the case of the *Alexandra Palace Co. v. Bignold*, under a £5000 pol., resulting in a verdict for plt., with leave to the deft. to move the Court for new trial. The facts were these: A pol. had been effected through an agent for the plt. Co. with the deft. Co. for 30 days only, and at the expiration of that time the Ins. Co., in consequence of a rep. made by its surveyor, refused to continue the risk. This fact was communicated to the plts. agent in writing: but before he had informed the plts. of it the Palace was burned. It is now erected in a style more grand than before.
- An article in the *Pall Mall Gazette*, remarking upon the many celebrated fires which had occurred in Lond. in the month of *June*, drew from a correspondent the following:
- I have seen in your paper a long list of remarkable fires that have happened in Lond. in the month of June. Something more than a chance coincidence seems to me to be involved in the facts to which you have drawn public attention. The solution offered by the science of astrology is that in June the sun is travelling through Gemini, long ago said by astrologers to be the ascendant of London. The Bull's North Horn, a star of second magnitude, described by Ptolemy as being of the nature of Mars, was in the year 1666, when the great fire of Lond. occurred, in 17° 54' of Gemini, the head ascendant of Lond. On Monday, the 9th, when the Alexandra Palace was burned down, the longitude of the sun at noon was 18° 39' of Gemini.
- This subject is referred to under FIRES AND FIRE INS., STATISTICS OF, 1865—Monthly Table of Lond. Fires.
- June 27.** *Hamilton* (Nevada). Town destroyed. Loss £100,000.
- July 26** *New York*. The Gov. bonded warehouses burned. Loss £100,000. (1872, 1876.)
- July** *Portland* (Oregon). A conflagration destroyed 366 buildings. Loss £375,000.
- Aug. 2** *Baltimore*. Over 100 buildings consumed. Loss £140,000. (1857.)
- Sept. 24** *Manchester*. The Athenæum building partly burned, with library of 19,000 vols. (1873.)
- Sept.** *Havana* (Cuba). Disastrous fire, which destroyed the Plaza Vapor, and rendered 2500 persons homeless. Loss estimated at £600,000. Ins. about £105,000, all in English cos. (1828.)
- Dec. 28** *West India Docks* (London). Considerable destruction of building and stores in one of the warehouses.
- " 29** *London*. Salisbury Square, Fleet Street; the printing and pub. offices of *Lloyd's Newspaper* destroyed. Loss £25,000.
- 1873** *Constantinople*. Destructive fire. (1872, 1874.)
- 1874** *Portsmouth* (England). Jan. 15. Serious fire in the "Sea Storehouse." (1861.)
- Jan. 17** *Ottawa* (Canada). The offices of Northern Pacific Railway burned. Loss £200,000.
- " 24** *Shorncliffe Camp* (Kent). A serious fire in the large county cavalry; 14 horses burned.
- Feb. 1** *Constantinople*. The Grand Vizier's Palace and about 100 houses destroyed. Later in the year a serious fire in the suburbs of Galata. (1873.)
- " 8** *Southwark* (London). Very serious fire in some ragstones in the arches of the London, Chatham & Dover Railway. The traffic of the line impeded for some hours.
- " 12** *Pimlico* (London). The "Pantehnicon," Motcomb Street, Belgrave Square, burned. In this vast building (supposed to be nearly fireproof), covering 2 acres of ground, was stowed away the furniture, works of art, and other

1874

personal effects of numerous families, many of whom were absent from England. The loss amounted in the whole to £1,850,000; the known ins. to £200,000, and this was upon the building. In some cases the furniture, etc., had been specially insured by the owners; and in other cases the pol. of individual owners had been indorsed specially, and therefore protected the goods while stored. The liability of the proprietors of the Pantechicon for the safety of the goods was tested, and resulted in their favour. The plate room remained intact, or the loss would have been much greater.

This building, as we have said, was regarded as fireproof. Turning to the adv. issued in 1839, the "nobility, gentry, artists, coachmakers, musical-instrument makers, and the public generally," were informed that "no expense had been spared in order to erect a building that would be proof against the destructive ravages of fire." Again: "The whole of the ceiling has been lathed with iron rods, and covered with a composition that will resist the strongest fire, and which will not fall down, or crack, if water be thrown upon it." These were the views taken of fireproof buildings at that date. [FIREPROOF BUILDINGS.]

Among the collections of historic interest destroyed at this fire were—

1. The splendid ancient armour, enamels, etc., collected by the late Marquis of Hertford, who devoted his whole attention and vast fortune to patronizing art. These were now the property of Sir Richard Wallace. 2. Lord Montague's rare selection of pictures, consisting of 70 *chef-d'œuvres*, as well as his very valuable library, and a fine marble statuette of the Venus de Medici. 3. Sir Seymour Fitzgerald's fine collection of old china. 4. All Sir Garnet Wolseley's accumulation of valuable *souvenirs* gathered in the Crimea, India, China, and the Canadian Dominion, during his brilliant career, he being then away fighting the Ashantees in Africa. Some of these, as also other collections, had been left here for years, in perfect confidence of their safety.

The Duke of Cambridge had a somewhat narrow escape at this fire from the sudden falling of a lofty wall.

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| Feb. 19 | <i>Panama</i> (Central America). Fire broke out in hat manufactory, and extended to Grand Hotel,—one of the finest buildings on the Pacific Coast,—and then to the City Saloon and some 20 private houses, all of which were destroyed. Loss £160,000 or more. Ins. £140,000 in some of the leading Brit. offices. (1870.) |
| April 1 | <i>Millerstown</i> (Penn.). About 71 houses and buildings destroyed, including principal hotel. Explosion of gas. |
| May 2 | <i>Radwinter</i> (Essex). Nearly the entire village burned. |
| " 19 | <i>Bury</i> (Lancashire). Woollen-mills of J. & E. Grundy, Limited. Loss £35,000. |
| June 9 | <i>Bermondsey</i> (London). The extensive tannery buildings and stores of Mr. E. Ellis burned; destruction and loss very great. |
| July 14 | <i>Chicago</i> . This city sustained a second great fire. The burnt district extended over some 60 acres; but many of the buildings burned were of small value, having escaped in the 1871 conflagration. The more important buildings destroyed were the New Post Office, 5 hotels, 4 chapels, 2 theatres, and some extensive business premises and fine dwellings. The estimated loss was under £1,000,000; while the ins. in force were over £500,000. The losses under the pol. were about £450,000. Nearly all the ins. offices doing bus. in the city, American and British, were interested in the loss. This second serious fire happening so soon after the former one, caused considerable alarm among the ins. offices; and they unitedly called upon the authorities to make more effective arrangements for Fire Extinguishment, on pain of having their risks absolutely refused. Improved arrangements have now been made. (1871.) |
| " 14 | <i>Oshkosh</i> (Wisconsin). Town nearly destroyed. Loss £200,000. Ins. about £50,000. The Brit. cos. almost nil. (1875.) |
| " 15 | <i>Chatham</i> (Kent). The barracks of the Royal Engineer officers seriously damaged. (1845.) |
| " 28 | <i>Liverpool</i> . The famous Landing Stage, nearly a quarter of a mile in length, and by far the largest structure of its kind—having cost £250,000 to build—was burned. (1869, 1876.) |
| Aug. 14 | <i>Bonny</i> (West Coast of Africa). About one-half of the residences in this town of savages burned; "the houses of Oko Jumbo and other native chiefs only escaping destruction by the merest chance." We did not hear of any Brit. offices being on the risks! |
| " 16 | <i>Market Harborough</i> (Leicestershire). Very destructive fire. |
| " 22 | <i>Nottingham</i> . The extensive cotton-mills of Mr. Samuel Morley, M.P. Loss nearly £100,000; ins. about half. |

- 1874
Sept. *Amsterdam*. Sept. 8. Extensive sugar refinery. Loss very considerable. (1858.)
Meiningen (Germany). Nearly half the town burned. Loss in buildings alone £450,000.
- Oct. 19 *Montreal*. A considerable block of houses destroyed. Loss £40,000. (1857.)
- " 27 *Over* (Cheshire). Cotton-mill of Messrs. Abraham Haigh & Son burned. Loss £60,000.
- Dec. 15 *Boston* (U.S.). A destructive fire occurred in one of the bus. centres of this city. Considerable damage was done to the shipping : but the fire was speedily extinguished. The damage was estimated at £200,000. (1873.)
- " 16 *London*. Oxford Street, Messrs. Collins, carriage builders, and other houses and premises. Great scarcity of water. Loss £30,000.
- Dec. *Cronstadt* (Russia). Great conflagration, which destroyed 9 squares or blocks of houses, including the bazaar. The buildings consisted of 101 wooden and 18 stone houses, 1 church, 2 chapels, 50 shops in the bazaar, and 78 shops attached to the marine barracks. About one-third of the pop. of Cronstadt was made homeless by this disaster. (1870.)
- " *Bermuda*. Great fire in H.M. immense coal stores. Supposed spontaneous combustion. [COALS.]
- 1874 *Auckland* (New Zealand). Two considerable fires reported. No details.
- 1875
Note.—There was a very large number of incendiary fires in *Russia* and also in *Poland* this year.
- Jan. 8 *En route* (U.S.). On Baltimore and Potomac Railway, 2 trains came in collision. The express train took fire, and the mails containing bank-notes to the value of £140,000 were burned.
- " 11 *Battersea* (London). The chemical manufacturing premises of Messrs. May & Baker burned ; several explosions. Loss £60,000.
- " 14 *Stellenbosch* (Cape of Good Hope). Some 50 houses destroyed. Loss £20,000.
- " 16 *Glasgow*. The extensive biscuit works of Messrs. Gray, Dunn & Co., and some adjoining properties. Loss £50,000. (1870, 1875.)
- Jan. *Alexandria*. The Viceroy's cotton stores at Famiglia burned. Loss £30,000.
- Feb. 11 *Port-au-Prince* (Hayti). Nearly 500 houses or one-fourth of the town. Fire only stopped by blowing up houses. Loss £400,000, chiefly falling upon the property of Brit., American, and German merchants. Supposed incendiary. (1866.)
- Mar. 28 *Edinburgh*. The Advocates' Library—one of the best in the U.K.—on fire. Extinguished before much damage done. (1865.)
- April 28 *Oshkosh* (Wisconsin). About 400 buildings destroyed. Loss £500,000, of which one-half insured. Only about £25,000 in Brit. cos. (1874.)
- May 15 *Peshawar* (India). Great destruction to this famous city. Progress of fire only stayed by blowing up buildings. The hot winds had prevailed and rendered everything very dry. Concurrently with the fire, a strong breeze sprung up, and spread the flames very rapidly.
- " 20 *Oskola* (Penn.). Great conflagration. Loss £400,000. Ins. under £100,000.
- June 19 *Dublin*. Great whisky fire ; destruction of bonded stores. Fire commenced in malt-house of Mr. Reid. About 37 dwellings also burned. Loss about £80,000. (1864.) The *Times* Correspondent, describing the incidents of the fire, said :
The streams of burning whisky, which to most people were appalling, offered to others a temptation which they could not resist. Although the streets were generally well guarded by the military and police, numbers of people got access through narrow lanes and passages unobserved to places where it ran most freely along the channels or formed in pools in the streets, and they resorted to every possible expedient to obtain draughts. Some tried to collect the liquor in their hats and others in their boots, and, failing to satisfy their passionate craving by such means, they lay down across the channels and lapped the intoxicating stream until some became helpless and almost insensible and were dragged off to hospitals, while others, seized with the same mania, rushed into their places and followed their example. It would be hard to conceive a more shocking exhibition of degrading vice.
- July *Belfast*. The Broadwood weaving factory, owned by Messrs. Gamble & Co., burned, with immense stock of linen goods. The weaving shed, which covered about 1½ acres, entirely destroyed. Loss nearly £150,000. (1859.)
- Aug. 12 *Preston* (Lancashire). The Park Road Mills of Messrs. Simpson & Co. Loss £40,000. (1866, 1875.)
- Aug. 28 *Ratcliffe* (London). Oporto Wharf ; several buildings ; damage £30,000.
- Oct. 20 *Brest* (France). Fire in the Arsenal. Loss £40,000. (1784.)
- " 26 *Virginia City* (Nevada). This city, forming the centre of one of the richest mining districts in the U.S., burned. The machinery of many of the mines seriously damaged. Loss £1,500,000 ; ins. about £400,000.
- " 27 *Iquique* (Peru). The fire was discovered at 2 A.M., and before noon three-fourths of the city had vanished. The loss was estimated at £1,000,000.

- 1875 "No ins. could be obtained, from the nature of the ground and the material employed for building, hence all was dead loss." The city was built almost entirely of wood, and the sideways were constructed of the same materials. The ground is impregnated with nitre. "Water was scarce, and the flames swept like a hurricane over the city, and baffled the exertions of the firemen." No rain falls here, and there are no springs of fresh water.
- Nov. 1 *Preston* (Lancashire). The cotton-mill of Messrs. Paul Cotterell & Son; 39,000 spindles. Loss £30,000. (1875.)
- " 12 *Glasgow*. "The largest fire which has ever occurred in Glasgow," at the spinning mill of the Newhall Cotton Factory; 85,000 spindles, and an extensive range of warehouses, known as Newhall Terrace, with other properties. Loss £300,000. (1875.)
- 1876 *Glenalmond College* (near Perth). A considerable portion of this fine modern building burned. Loss £25,000.
- Jan. 10 *Royton* (near Oldham). The Belgian cotton-mills, working 50,000 spindles, were burned. Loss £40,000, mostly covered by ins.
- " 26 *Tarsus* (Asiatic Turkey). This city of St. Paul, which under the Romans was as renowned for its culture as its commerce, had its bazaar reduced to ruins. Loss £150,000.
- Unfortunately Tarsus, although it contains about 20,000 inhabitants, is at this season of the year without any supply of water. There was an old fountain in the middle of the bazaar, but it has been dry for some time, and, as there was a strong breeze blowing, the fire spread rapidly without any effort being made, to extinguish it. After some little time the Governor appeared on the scene, accompanied by the police force and one small fire engine. With praiseworthy energy he at once despatched two horses to bring some water, and, two loads of this article having been obtained, the small engine was set to work. The Governor, however, suddenly took it into his head that his first duty was to protect a powder magazine, situated in an isolated spot at some distance from the town, and he therefore hurried off to the magazine, taking the police with him.
- With no water, no Governor, and no police, of course the fire was master of the situation; and so were the thieves who abound in Tarsus, and who reaped a rich harvest by carrying off the goods which were dragged out of the shops for safety as the fire extended. The town was, in fact, given over to pillage, and but for a sudden change in the wind, the larger portion of it would no doubt have been destroyed. By pulling down some wooden sunshades the progress of the flames was at last arrested, and happily no lives were lost, but one man in his fright threw himself into a well, and met what ought to have been a watery grave.—*Pall Mall Gazette*.
- The cause of the fire was believed to be rats gnawing lucifer matches in an unoccupied shop.
- Feb. 8 *New York*. The Broadway and Crosby Street fire. This occurred among a number of dry-goods warehouses, and at one period bid fair to become one of the most prominent fires of this century. The exertions of the Brigade were most effective. A considerable number of buildings were burned or injured. No less than 191 ins. offices were interested, their aggregate ins. being £683,619. The actual loss amounted to £350,027. The British offices were interested. (1873.)
- April 23 *Britton* (near Bristol). Messrs. Somerville's paper-mills. Damage from £70,000 to £100,000. Insured.
- May 30 *Quebec*. In the St. Louis suburb of this city about 700 dwellings were destroyed. Loss about £160,000. This fire brought to light the fact that this city of 60,000 souls is dependent for its water supply upon an 18 inch main connecting with the Lorette reservoir; and that so scanty is the supply that the water has to be let on to one part of the city in the forenoon and to the other half in the afternoon. (1870, 1876.)
- A meeting of ins. agents was held on 31st May, to consider the present situation of Quebec as regards the ins. bus. Several urged the absolute necessity of the citizens taking greater precautions to prevent the occurrence of such a catastrophe as that of Tuesday. Mr. McGee said there was no water long after the fire broke out, which was the cause of its making such headway. The mayor explained that it always took 35 minutes to turn on the water as on this occasion, from the lower to the upper level, which accounts for the delay. Mr. Smith said the fire brigade was next to useless, and Quebec was behind the smallest western towns. The wooden building bye-law is not enforced, and the ins. cos. have been misled and were doing bus. under false pretences. Mr. Walker thought no cos. should insure wooden buildings. An attempt is being made to bind the ins. cos. not to insure wooden buildings or buildings covered with wood.—*Chronicle*.
- June 2 *Canterbury*. The western tower on fire, arising from the use of benzoline in cleaning the works of the clock. The fire was speedily extinguished, although at the cost of the life of Mr. Trimnell, on whom the responsibility of having introduced this dangerous fluid rested. (1872.)
- This incident led to a considerable correspondence regarding the measures of precaution to be taken in cathedrals. The following, under the signature of Mr. Charles G. Ferguson, of Carlisle, gives some important suggestions and details:
- Permit me . . . to explain that the suggestion in my former letter that any water system should be tested by some independent body is admirably met at Salisbury, where

- 1876 the Dean and Chapter have also thought it necessary that the hose-pipes, etc., should be periodically tested, and this is done every quarter by the superintendent of the Salisbury Fire Brigade. The security of one building over another where a water system exists depends mainly on its readiness of application. I think, therefore, the examining body should be independent, not of the Dean and Chapter, but of the servants in charge of the apparatus. I regret to find that my former letter should have led to the inference that such establishments as Westminster Abbey or York are in an insecure condition, for I cannot myself too strongly express my admiration of the well-devised water systems adopted there, and also at Durham, Gloucester, Salisbury, and Wells. The example of Worcester has been followed by several others, and I hope that the next inquirer will find the list of those establishments unprovided with sufficient apparatus still further reduced.
- June 2 *Paddington* (London). Messrs. Chick & Co.'s furniture depository. Loss about £120,000, falling mostly upon some of the older fire offices. Jewelry, etc., preserved in Milner's safes.
- " 15 *London*. Brook's Wharf, Upper Thames Street, great destruction of merchandize. Loss £200,000. There can be no doubt that this was an incendiary fire, caused partly from revenge, and partly to conceal robberies. The investigation of this part of the case is still before the Courts.
- " 15 *Ayr* (Scotland). Carpet manufactory and wool works of Mr. James Templeton, and many houses adjoining burned. Many of the factory girls were on one of the floors of the building and could not escape; 29 of these were burned to cinders, so that their remains would scarcely fill one coffin. Loss nearly £100,000.
- " 17 *Radschwy* (?). Three-fourths of the town, including the bazaar, burned.
- " 18 *Moscow*. Conflagration destroying more than 50 houses. Loss enormous. (1814.)
- " 18 *St. John's* (Quebec). A conflagration destroying almost the whole bus. portion of the town. Both sides of Richelieu Street and the east side of Champlain Street were burnt down in their entire length, including 7 hotels, 9 churches, the custom-house, the court-house, two banks, the woollen mills, the docks, the bridge, and several vessels. Altogether about 200 stores and dwelling-houses were burnt down, and the destroyed district is one mile long and 600 feet wide. The damage done to property is estimated at £500,000, to which loss of contents must be added.
- June *St. Petersburg* (Russia). The workshops and carriage sheds of the Warsaw Railway Station in this city. Loss £200,000. (1862.)
- July 9 *Elgg* (Canton Zurich). Some 52 houses and buildings burned.
- " 15 *London*. Little Windmill Street, Soho. Considerable destruction of property. Loss £60,000.
- " 17 *Liverpool*. Corn and cotton warehouses in the Goree. Great damage. (1874.)
- " 18 *Chelsea* (London). Great conflagration commenced at a builder's and extended to gutta-percha works, also burning a number of dwellings. Loss very considerable. On the 20th, in the House of Commons, Mr. Bass asked the Home Sec. whether he was aware that a destructive fire was raging at Chelsea on Tuesday night for 40 minutes before any fire engine arrived, though the fire was seen for many miles around. Mr. Cross said that, as Sec. of State, he had no control over the Metropolitan Fire Brigade, which was entirely in the jurisdiction of the Metropolitan Board of Works, but he had made inquiries, and was told that information of this fire reached the station at 11'23, and that the first engine arrived at the fire at 11'30. This statement referred to one side of the building. He was told that an engine was not sent round to the other side of the building for some considerable time afterwards.
- A Parl. Committee is taking evidence regarding the measures necessary to be taken for the further protection of the metropolis from fire. [LONDON.]
- " 20 *Albervie* (Switzerland). Town totally destroyed.
- " 20 *Gavray* (near Cherbourg). About 100 houses burned.
- " 23 *Porta Vescovo* (Italy). The Railway Station with much produce burned. Loss £40,000.
- " 24 *London*. St. Luke's. The steam saw mills of Messrs. Bridgeman. Considerable destruction of property.
- July *London*. New Dundee Wharf. Considerable damage. [JUTE.]
- Aug. 3 *Perry-bar* (near Birmingham). At the works of the Holdford Mills, belonging to the National Arms and Ammunition Co. One wing destroyed. Damage considerable. Insured.
- " 5 *York*. Granary of Messrs. Simson, and cocoa manufactory adjoining. Loss considerable.
- " 10 *Caramujo* (Portugal). The warehouses of the London and Lisbon Cork Co. on the Tagus burned.
- Aug. *London*. Turnmill Street. The large printing and pub. estab. of Messrs. Grant & Co. Loss very considerable.
- " *Soderhamn* (Sweden). This thriving town of 6000 inhabitants nearly destroyed. Loss very considerable.

1876 Aug.	<i>Saintes</i> (Charente-Inférieure, France). The peat soil of the wood of Cadeuil on fire. Great destruction of timber. [Growing timber forms the subject of ins. in France.]
" 28	<i>San Francisco</i> . A whole block of houses bounded by Brannon, Townend, and Third and Fourth Streets destroyed by fire. The loss of property estimated at £100,000. The utter inefficiency of the water supply in this city was made painfully manifest by this fire. (1854.)
Sept. 1	<i>Great Horwood</i> (Bucks). Wind and steam flouring-mill burned. During a heavy gale a piece of timber used to block the sails became displaced; they being thus at the mercy of the wind worked at such a terrific rate that the friction of the machinery fired the mill. Loss considerable.
" 1	<i>Batley</i> (near Leeds). Woollen-mills of Messrs. George and Samuel Jubb, containing much valuable machinery. Loss over £40,000.
" 3	<i>St. Hyacinth</i> (Canada). Town nearly consumed, including Post Office, Market, Court House, 3 banks, several factories, about 80 stores, and 500 other buildings, constituting the main and three parallel streets. Water supply defective; being in transition state. Loss about £250,000, largely insured in local and British offices. The fire was found to be the work of an incendiary.
" 8	<i>Scarborough</i> (Yorks). The Spa building, including saloon, theatre, refreshment-rooms, etc., destroyed. Loss very considerable. The buildings were designed and the grounds laid out by the late Sir Joseph Paxton.
" 11	<i>Paris</i> . Great fire in Rue de Bondy, a densely populated manufacturing quarter. Loss £80,000. (1869.)
" 13	<i>London</i> . The premises of Messrs Wilkins & Co., lighthouse manufacturers and engineers, Long Acre; also the workshops of Messrs. Silk & Co, coach-builders, and some adjoining properties. Damage very considerable.
" 27	<i>Widness</i> (Lancashire). The works of the Alkali Co. Lim.—chemical works employing 500 men. Water had little effect in staying the progress of the flames. Large quantities of valuable machinery destroyed. Loss £25,000.
" 29	<i>Ringend</i> (Dublin). The rope and sail manufactory of Mr. Thomas Crosbie. "Loss very heavy."
Sept.	<i>Baltimore</i> . Two serious fires on the same day, involving considerable destruction of property.
Oct. 8	<i>Rotherhithe</i> (London). New Wharf Flour and Rice Mills, of Messrs. Woodbridge, Smith & Co., destroyed. The building contained large quantities of grain, which speedily began to swell in consequence of the water and the heat, causing the walls to bulge out and fall. Loss over £80,000. The Salvage Corps saved large quantities of stores.
" 14	<i>Aldershot</i> (Hants). The Royal Skating Rink, at this great military station, burned. It was constructed of timber and fully insured. This is a new class of risk.
" 31	<i>Liverpool</i> . Premises of the Mersey Seed Crushing Co., Vauxhall Road. Loss £30,000. (1876.)
1876	<i>Kupischok</i> (Russian Poland). A city inhabited entirely by Jews. About 400 dwellings and shops, including the Great Synagogue, and several schools, burned. Loss £200,000.

Note.—1876 has proved a highly incendiary year. It furnishes another instance of the influence of high temperature. Our record is only carried to the end of October.

[This Table has extended to dimensions we had not foreseen, involving alike time and labour. We hope it may prove of interest to the general reader, and of some value to fire underwriters. The dates, which we have given where possible, will be of value for many purposes of reference. As to the "importance" of the fires included, it is quite clear that the destruction of even 20 or 30 houses in a village, of the aggregate value of £10,000 or £15,000, is of far greater concern to that community than the destruction of a warehouse in Lond. involving a loss of £60,000 or £100,000 to its citizens. So the fires of several centuries since, involving comparatively small sums of the then currency, are really equal (by reason of the altered value of money) to much larger sums in the present day. The other "historical fires" included speak for themselves. We shall be glad to receive notes of omissions, as also corrections of errors.

The subject of this Table will be considered at the close of art. FIRES AND FIRE INS., STATISTICS OF.]

FIRES, INCENDIARY.—See ARSON; FIRES CAUSED WILFULLY; and INCENDIARY FIRES.

FIRES, INVESTIGATION INTO ORIGIN OF.—See FIRE INQUESTS.

FIRES, LOSS OF LIFE BY, AND PRESERVATION OF LIFE FROM.—The dread with which the loss of life from fire has been regarded from the earliest times may be learned in many ways. The institution of the CURFEW is a marked instance in point. Others have been given under title of FIRE PROTECTION.

The ann. loss of life occasioned by fire is very considerable. The deaths range them-

selves under two classes, in regard to their causes: 1. Those resulting from burns and scalds, in the ordinary sense. 2. Those resulting directly from the burning of houses, and more especially the burning of towns. In a considerable proportion of the large fires which we have recorded in a preceding article, lives have been either lost or placed in great danger. In some instances the loss of life was immense. It may be stated as a general principle that every fire places life in danger, either directly or indirectly. Among the indirect causes may be regarded fatal accidents to the firemen, and persons run over by fire engines, etc.

1836.—The Royal So. for the Protection of Life from Fire was founded this year. Its operations in providing Fire Escapes for Lond. have been referred to in some detail under FIRE ESCAPES. The cost of estab. a Fire Escape Station orig. was about £70. This included the machine, the tarpaulin cover for it, and the watch box for the conductor. The ann. expense of maintaining a station, including wages of conductor, was £80. (See 1867.)

1849.—The statistics of the Royal So. for the Protection of Life from Fire, as compiled by Mr. Baddeley, showed that during the 17 years 1833-49, in connexion with what he terms 231 "fatal fires," 342 lives were lost. The number of lives saved by the operations of the So. have been spoken of under FIRE ESCAPES; and will be again referred to under FIRES AND F. INS., STATISTICS OF (1850).

1856.—The *Absolute Life*, founded this year, announced: "Assurances are granted, payable in the event of loss of life by fire." No details were given. Accident ins. pol. cover this risk.

1858.—The deaths regis. in the Metropolis from burns and scalds this year amounted to 309, being in the proportion of 11·6 to 100,000 of the pop. (See 1867.)

1862.—A Select Parl. Committee was appointed "to inquire into the existing state of Legislation, and of any existing arrangements for the protection of life and property against fire in the Metropolis." The labours of the Committee were mainly directed towards the appliances for preventing the spread of fires; and these have been referred to in detail under FIRE PROTECTION. In the report of the Committee appear the following passages:

24. The Committee would desire to call attention to the estab. called the "So. for the Protection of Life from Fire," particulars of which are set forth in the evidence of Mr. Sampson Low, the present Sec. of that Inst.

25. It is supported entirely by voluntary contributions; 75 separate stations have been formed in different parts of Lond., and great service has been rendered by saving the lives of very many persons.

26. The So. has been in active operation during the last 18 years. It is well conducted; the men of the estab. are reported to be very efficient, and great public benefit has resulted from its estab. The expense of maintenance is about £7000 a year.

Among the Rules then in force by the So. referred to were the following:

13. When called to a fire, the conductor will immediately obtain the assistance of 3 persons (police constables being preferred), and losing no time in starting, proceed with his escape to the fire. On his way he will explain as well as he can the nature of the assistance to be rendered—particularly cautioning them to let no person ascend the escape except the conductor.

14. On arriving at the fire, the conductor is to place his escape in the most advantageous position, allowing no person to touch it beyond those he has selected, one of whom is to be stationed at the lever, while the conductor ascends the ladder. *The whole attention and utmost energy of the conductor is to be given to the preservation of life;* and having ascertained beyond a doubt that the inmates are out of danger, and that no further service is required of him, he must take his escape back to the station with all reasonable speed.

15. If, from the peculiar construction or situation of the house on fire, the large escape cannot be available, the conductor, resigning it to the charge of the police constable, will make the best of his way to the roof of the adjoining house, or otherwise take such steps as are most likely to rescue the lives in danger, availing himself of his short ladder, ropes, crowbar, etc.; if in a narrow court, try and render assistance from the opposite window, by placing the ladder across.

For rewards paid to persons calling fire escapes, see FIRE CALLS, 1867.

1863.—The fire in the Cathedral of Santiago this year destroyed nearly 2000 victims, mostly women and children. [FIRES, GREAT.]

1866.—Under sec. 11 of the "Metropolitan Fire Brigade Act, 1865"—28 & 29 Vict. c. 90—which was to come into operation on 1 Jan. 1866, power was given to the Metropolitan Board of Works "to make such arrangements as they think fit as to estab. fire escapes throughout the Metropolis." They might for that purpose contribute to the funds of the Royal So. for the Protection of Life from Fire, or of any existing So. that provided fire escapes, or might purchase or take by agreement the property of any existing So. in their stations and fire escapes, and generally might maintain such fire escapes, and do such things as they might think expedient towards aiding persons to escape from fire; and any expenses incurred in pursuance of this sec. should be deemed to be expenses incurred in carrying into effect this Act.

1867.—The Metropolitan Board of Works in the early part of this year took over all the property of the Royal So., etc. The number of stations was then 85, and the number of men employed 100.

The Select Parl. Committee on *Fire Protection* which sat this year directed special attention to the appliances which existed in provincial towns, as well as in the metropolis, for the protection of life from fire. The results of those inquiries have been generally stated under FIRE PROTECTION at this date.

The number of deaths in the metropolis from burns and scalds this year was 302,

being in the ratio of 9·7 p. 100,000 of the pop. In the 10 years 1858-67, no less than 3258 lives were destroyed in the metropolis from these causes.

T. of Deaths in England and Wales from Burns and Scalds in the 20 Years 1848-67 and in each of the four Years 1868-71.

AGES.	In the 20 Years 1848-67.		In 1868.		In 1869.		In 1870.		In 1871.	
	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.	Males.	Fem.
ALL AGES	28047	28246	1449	1104	1386	1159	1367	1211	1355	1257
Under										
5 Years	15675*	12872*	731	570	716	576	723	596	727	568
5—	3817	6551	150	200	114	221	121	235	125	230
10—	1079	1713	51	46	71	51	51	48	45	62
15—	2132	1301	147	51	147	62	114	54	109	85
25—	1768	716	138	23	127	32	108	32	108	32
35—	1280	630	95	25	88	24	96	33	92	43
45—	829	702	53	30	57	25	59	35	56	31
55—	574	763	42	45	36	33	44	28	47	50
65—	410	1161	24	45	12	58	29	55	19	55
75—	285	1356	14	52	13	58	17	63	22	76
85—	94	449	4	17	5	17	4	30	5	22
95—	4	32	—	—	—	2	1	2	—	3
and up,										

* Of the 15,675 males dying of burns under 5 years of age, 1014 were less than 1 year of age; 3903 were 1 year and under 2; 4089 were 2 years and under 3; 3711 were 3 years and under 4; 2958 were 4 years and under 5. Of the 12,872 females dying under 5 years of age, 1020 were less than 1 year of age; 3088 were 1 year and under 2; 3056 were 2 years and under 3; 3096 were 3 years and under 4; 2612 were 4 years and under 5.

Dr. Farr has pub. the following suggestions for preventing death by fire :

1. *Open fires*, lights, and kettles of hot water, should be surrounded by *good guards*. This precaution is of capital importance.
2. Children and young people, and old women, should be systematically taught the danger of fire.
3. The dresses of young children and old women should be made as much as possible of worsted or wool ; which will protect them against cold, as well as against fire.
4. The muslin dresses, and cotton and linen clothes, might very properly be starched with the chemical materials which are found by experience to render them, to a certain extent, incombustible.
5. Private houses should all be provided on each floor of the sleeping apartments with the means of escape, in the event of the lower apartments taking fire during the night. Especial provision to be made for women and children.
6. Fireworks, powder-works, and chemical manufactories require special precautions.
7. Persons falling asleep near the fire, or near lights, in a state of intoxication, or in fits, are frequently burnt to death.
8. Young children drink scalding water out of the spout of the tea kettle, or fall into scalding water. This happens often in the lower classes, when the mother is out at work, and the young children are left at home alone. The means of obviating this danger are evident.
9. Special arrangements are, it is scarcely necessary to add, required for preventing the explosions of mines or of steam engines. [FIREMEN'S RESPIRATORS.] [FIREPROOF DRESS.]

1875.—At the 38th Ann. Meeting of the Royal So. for the Protection of Life from Fire, held this year, it was reported that 44 suburban and provincial fire escape stations had been estab.

The steps taken by the Metropolitan Board of Works, in ordering respirators for the men in charge of the fire escapes, in view of aiding them more efficiently in the saving of life, have already been stated under FIREMEN'S RESPIRATORS, under this date.

Sir W. Fraser called the attention of the House of Commons to the inadequate provisions for the safety of the public in the case of fire in the London theatres. He said that as far back as 1866 it had been calculated that there was a daily average of 60,000 persons in the London theatres, and about 200,000 persons in other places of amusement, since which the numbers had greatly increased. Something was required to be done for their protection in case of fire or panic. It was stated in reply that they were

now regularly inspected by a competent architect, and were much improved in regard to means of exit. [THEATRES.]

1876.—At the Brussels International Exhibition and Congress held this year, Class I. was devoted to the appliances for Saving of Life from Fire, and was divided into the following sections :

- I.—Apparatus and Means for Preservation against Fire by Land and by Sea.
 1. Construction of Buildings, of Powder Magazines, of Petroleum Stores, and of Ships.
 2. Preparation of Timber, Woodwork, Clothing, Furniture, Decorations, etc., to resist Fire.
 3. Lightning Conductors.
- II.—Instruments and other Means of Directing and Announcing Fire ; Fire Alarms, Telegraphs, etc.
- III.—Apparatus and Instruments for Saving Life—Ladders, Sacks, Cordage, Parachutes, Respiratory Apparatus, Ventilators, etc.
- IV. Apparatus, Instruments, and Substances for Extinguishing Fire—Steam and other Fire Engines and their Accessories ; Fire Extinguishers and Chemical Agents ; Reservoirs, Water Pipes, Hose, etc.
- V.—Means of Transport for Men and Matériel.

The following Rules, laid down for "Bystanders" in regard to the saving of life, may be useful here :

In the absence of a fire escape, or pending its arrival, ladders and ropes should be sought for. Two constables or other qualified persons should ascend the roof through the adjoining houses. The most efficient assistance can sometimes be rendered by an entrance to the upper part of the house on fire, either by the attic window, the loft door, or by removing the tiles ; or sometimes the aid of one end of a rope (knotted) might be afforded from the adjoining window, which being passed by the person in danger round some article in the room, he could lower himself or others into the street ; the other end of the rope being controlled, of course, by those rendering aid from the other house.

FIRES OCCASIONED BY LOCOMOTIVE ENGINES.—See LOCOMOTIVE ENGINES, FIRES OCCASIONED BY.

FIRES, ORIGIN OF.—See FIRES, CAUSES OF.

FIRES ON BOARD SHIP.—If fires on land be held in so much dread as to call forth continuous measures for protection against them, how much more to be dreaded are fires on board ship. Here, frequently, there is no escape but drowning, or inevitable starvation. Fire then is justly regarded as one of the most terrible and destructive perils to which life and property at sea can be subjected. In respect to merchandize, it may be well at once to state that the marine underwriter is generally liable for loss from this cause, except where it shall arise from combustion generated "through their own inherent vice," or in consequence of the goods having been shipped in a damaged state. But if the combustion is originated by sea damage sustained after shipment, it is covered by the pol.; and however the fire may have been occasioned, if it extend to other goods which are innocent of the cause of disaster, or to the ship herself, the underwriter is responsible. Damage caused by pouring water into the hold, or scuttling the ship, or taking other violent measures to extinguish the fire, is recoverable either as General or Particular Average. [SHIPS, INS. OF, AGAINST FIRE.]

The causes of fire on board ship are various. It may arise from lightning ; from spontaneous combustion of the cargo ; from accident ; from negligence ; or it may be occasioned wilfully. Even wilful burning will not release the underwriters, unless it can be traced to the owner. From every point of view, then, the subject is an important one ; and we have indeed now only to glance at the statistics of fires of this class to complete the view of their impressiveness. In the 8 years ending 31 Dec. 1873 the number of vessels reported to Lloyds as burnt, or on fire, amounted to—sailing vessels, 1158 ; steamers, 321 : in all 1479 ships—being at the rate of 185 p.a.

We propose here to confine ourselves mainly to the means to be employed to prevent the occurrence of these fires, and to aid in their extinguishment.

1632.—Among the various patents issued by King Charles I. this year was one to Thomas Grent, a physician, for (*inter alia*) "a water-bowe" for the more speedy preservation of houses on land and ships at sea from fire. This we assume was simply a fire engine of the ordinary manual type.

1793.—Mr. John Read, of the Royal Military Repository, Woolwich, devised a system of water pipes, to reach all or any parts of a ship, the water being forced through these by means of a small engine, "such as those used for watering gardens." This invention attracted a good deal of attention.

1796.—Under date Dec. 20 this year there was issued from H. M.'s Dockyard, Portsmouth, by the then Inspector-Gen. of Naval Works, Sir Samuel Bentham, addressed to the Admiralty : *Suggestions respecting the various uses to which an apparatus for raising water by means of a forcing pump is applicable on board ship, submitted for their Lordships' consideration, and upon which some decision is requested for the purpose of establishing the services to which apparatus of this kind should be adopted, wherein occurs the following passage :*

With respect to the important purpose of extinguishing fire, it is conceived that the whole apparatus

to be used in cases of such emergency should, as far as possible, be no other than what is in daily use for ordinary purposes.

It is customary to have a cask of water on the tops of ships in time of action, ready for a quantity to be thrown, by means of ladles or scoops, upon sail or cordage on fire. A small kind of fire engine, by affording means of throwing the water with more certainty, as well as to a greater distance, would enable a small quantity of water to be made more serviceable.

The uses to which an apparatus for raising clean sea-water on board ship might be applied would then be as follows: 1. The forcing of water in hoses or pipes to the tops, to supply the engines fixed there. 2. To distribute water in large quantities to any part of the interior of a ship, and particularly to the magazine in case of fire.

1859.—The *Great Western Marine Ins. Co., U.S.*, suffered losses to the extent of £104,400 from fires at sea during this year.

1860.—The number of fires at sea last year, more particularly in cotton-laden ships, drew the attention of the Liverpool underwriters to the subject, and they instructed their Sec., Mr. Court, to investigate and report thereon. In his report he enumerates the following causes. 1. Spontaneous combustion, arising from the presence of oil or grease, or arising from moisture after exposure to heavy rains while the cotton was exposed on the wharves before shipment. 2. Smoking of labourers. 3. Sparks from passing steamers, during progress of loading. 4. Wilful ignition of cargo by the crew. 5. Lightning running down masts and rigging into cargo, of which several instances were quoted. 6. The introducing into the bales, at the cotton presses, foreign substances intended, or calculated, to ignite during the voyage. Of this latter evil several instances were given.

1864-5.—Mr. Stewart Harrison proposed a plan of self-acting sprinklers for fire extinguishment in buildings, factories, etc. We have given a brief outline of his plan under FIRE EXTINGUISHMENT. He also proposed that it should be applied on board ship, overlooking the fact, apparently, that water is frequently as destructive to cargo as fire.

1867.—Before the Select Parl. Committee on Fire Protection, which sat this year, Prof. Lyon Playfair gave evidence of the great danger of fire on board steamships in consequence of the use of turpentine and other inflammable spirits, and of mineral oils, which throw off vapours when exposed to the action of heat. He gave distinct instances of several fires which had occurred on large steamers, involving great loss of life, clearly traceable to these causes. (Q. 2957.) [OILS.]

1872.—During this year several large steamers, including 2 of the Pacific Mail line (the *Bienville* and the *America*, valued at over £400,000), were burned in the U.S. This circumstance drew attention to the storage of merchandize on steam vessels. It was found that lucifer matches, benzine, kerosene oil, gunpowder, and other dangerous articles were all stowed in close proximity; while fireworks and other explosives were frequently shipped on board the same vessels under the designation of "Fancy Goods." It is required by the laws of most of the maritime States in the U.S., as in the U.K. and elsewhere, that packages containing inflammable, combustible, or explosive materials, shall be plainly marked on the outside with a statement of the contents. But in practice all sorts of deceptive devices are resorted to in view of avoiding these wholesome regulations.

1874.—In our art. FIRE ANNIHILATORS, under this date, we have given some account of several inventions designed especially to extinguish fires on board ship, not only with speed in view of the safety of the passengers, but also with regard to inflicting the smallest possible damage on the cargo, a matter of great moment to marine underwriters.

No less than 7 ships, English and American, engaged in carrying soft coal from England to ports in the Pacific, were burned this year, and much attention was called to the subject. It was stated to be usual with cargoes of this class to keep the hatchways open in fair weather, in order to allow the easy escape of gases given off. We have already spoken of other necessary precautions under COALS. The subject was a good deal discussed in the public newspapers this year.

The important case of *Achard v. Ring and others* was before the English Courts this year. It was an action by the charterer of a ship against the ship-owner to recover the value of a damaged cargo destroyed by scuttling the ship in order to put out a fire. Points which had long been in controversy were raised; and in the end a verdict was found for the plt. The subject will be referred to under other heads, as GENERAL AVERAGE; and SHIPS, INS. OF, AGAINST FIRE.

1875.—The news of the burning of the *Cospatrick* emigrant ship [on the 17 Nov. 1874], and the loss of about 430 of her passengers, which came to hand at the close of last year, caused much attention to be given to the subject of preventing, as also of extinguishing fires at sea. We shall pass in review the several proposals made.

Before the Society of Arts, on Feb. 3, Mr. J. A. Coleman, C.E., read a paper: *On Apparatus for the Protection of Buildings and Ships from Fire, and for the Ventilation of Ships.* We have already spoken of his system, as applied to buildings, under FIRE EXTINGUISHMENT. We now turn to the writer's proposals regarding Ships:

If a fixed apparatus is needed in a building upon shore, how absolute is the necessity in the limited space upon a ship to have a means of driving water through fire and smoke, without the necessity for

a man to go near the danger. . . . The description already given renders it only necessary to say that the plan proposed embraces the arrangement of main pipes along the length of a vessel, with perforated branch pipes extended across the ceiling of each hold between the deck beams. The apparatus may be divided into as many sections as desired, in order to wet as much or as little of the ship at a time as may be deemed proper. All the main arteries would be connected directly with the steam pumps at the engine-room, with cocks commanding each section of the ship, also in the same place. These same arteries would also receive steam directly from the boiler by suitable connexions. The engineer, standing at his regular post, could throw a heavy shower of water upon the interior of any part of the ship by merely opening the cock upon the main pipe connecting with that section. *For a small fire he may turn steam through the same apparatus*; but should this fail, he may then render the operation certain by turning on the water instead, without any necessity for a man going near the fire. . . . With sailing ships enough has been said to demonstrate that the sprinkling system of pipes would give the greatest effect with the limited quantity of water furnished by hand pumps; and were the further expedient adopted of a quick steam-making boiler, with occasional practice in its use, it is difficult to conceive the loss of a ship at sea by fire.

As regards the use of "steam" as an extinguisher, he offers the following important obs.:

Its value depends upon circumstances. In confined spaces, of limited dimensions, it has been useful in holding fire in check, but rarely, I think, extinguishes it; while in experiments I have made in turning steam into a space where a draught existed, it simply augmented the force of the flames. It must be very damp steam, and used in a very large volume, to be effective; and even then, so far as my own observation extends, as well as testimony derived from accounts of its use, it smothers the fire, but generally leaves it in a smouldering state. *It would not be a thoroughly reliable agent to depend upon alone under all circumstances.*

In the discussion which followed, Mr. A. W. Le Maitre spoke to the following effect:

A great difficulty in the way of the application of such a system to vessels would be the cost, which he understood would be £300 for a ship of 1200 tons. He had made investigations into this subject, and had submitted plans to Lloyds for extinguishing fires at sea; *but he found that so many ships were sent out for the express purpose of being lost*, and the profits of freightage were said to be so small, that any add. expense would be a great objection. The practical result was, that any system to have a chance of success must be very simple, inexpensive and effectual. Another difficulty was, that if fire was put out by water, in the majority of cases, though the ship might be saved, the cargo would be entirely ruined. . . . He had at present the means of communicating with some of the largest ship-owners, before whom he intended to lay some plans of his own, which, if favourably received, he would make public.

A correspondent to the Journ. of the So. of Arts, dating from Ceylon in March this year, spoke of the great services which he had seen rendered in the case of the *Indiana* steamship, when on fire, by the "Extincteur," and recommending that several of these be fixed in the hold of every ship, with the means of starting them into action from the deck.

The next suggestion came in the form of a proposition from a well-known French savant, the editor of *Les Mondes*. He proposed that brimstone should be carried on board every ship for use in case of fire. Half a hundred weight of this material, he stated, would be amply sufficient to abstract the whole of the oxygen from 3500 cubic feet of air, thus rendering it unfit to support combustion. In a closed place, like a ship's hold, the sulphurous gas produced by the burning of the brimstone would penetrate where water from the decks could not be brought to bear, and the density of the gas would prevent its rising or spreading if pains were taken to close the hatches carefully. It was further suggested that the brimstone should be made up in the form of large matches, the ends of which should be passed through scuttles prepared for them in the decks or bulkheads.

In the *Times*, "Nautilus" still urged the use of steam in the case of steamships:

One agency appears to have been entirely overlooked or forgotten, and which, from experiments I have witnessed, I believe to be the simplest, readiest, and by far the most effectual. I mean the introduction, by means of a steam pipe connected with the boilers, of a jet of steam into each of the compartments into which all properly-constructed steamships are divided by means of water-tight bulkheads. This jet is regulated by steam cocks under the control of the engineer, and is sufficient, where the hatches are properly closed and battened, to stifle any flame that can be supposed to exist. This arrangement, I know, is in existence on board some, if not all, of the Peninsular & Oriental ships, and I have been under the impression it had been generally introduced in those of the Cunard, Royal Mail, and other contract packets. It would appear, from the report of the fire on board the *Nile*, it did not exist there, or I am of opinion the result would have been less disastrous.

Its advantage over water is that its power of extinction distributes itself equally over every part of the hold, to which, when the fire occurs near the upper part, water cannot always reach, at all events until much valuable time elapses and considerable risk to the ship occurs. The mail steamers being generally built under very rigid supervision, are usually of stronger and better materials and workmanship, and their bulkheads are required to be of sufficient strength to resist the pressure of any body of water that may be brought against them. There is, therefore, every facility for applying this agency, which involves the most trifling cost.

In the *Standard* of June 10 it was reported that on the previous day a number of gentlemen connected with shipping interests were present on board the steam-tug *Renown*, off Greenhithe, for the purpose of witnessing experiments demonstrative of the capabilities of the "pyroletor," or fire destroyer, patented by Messrs. Harris & Paton, of Glasgow. A barge of between 40 and 50 tons burden was fitted up for the occasion, so as to form a hold 30 ft. long by 8 ft. wide, and about 10 ft. deep, lined with sheet iron, and covered at the top by extemporized hatchways, which, however, were far from being air tight, and consequently to that extent unfavourable to the success of the experiments. Along the entire length and width of the hold cotton waste shavings, and small wood saturated with oil and naphtha, were placed to the depth of about 2 ft., and ignited on a given signal, within two minutes of which dense volumes of flame and smoke issued from the open hatchways. The hatchways were then battened down, and the apparatus being set to work, the flames were completely extinguished within four minutes.

The "pyroletor," by means of which this result was effected, is a small pump, which draws from tubs placed on each side of it simultaneous supplies of muriatic acid and a solution of bicarbonate of soda and water. Both mixtures then meet in a generator, and instantaneously pass into a separator, whence dry carbonic acid gas is evolved, and passes through fixed pipes to the *locale* of the fire, which it speedily suppresses. The apparatus is worked by 4 men, and can be moved or fixed so as to communicate with the different holds or sections of a vessel, and it is computed that $3\frac{1}{2}$ p.c. of the carbonic acid gas introduced into any cubic space where a fire is raging will be sufficient to extinguish it. The proportion of chemicals required to be carried is one pound of each p. tonnage measurement, which for a ship, say of 1200 tons burden, would cost from £20 to £30. Not the least merit of the invention is that a fire can readily be extinguished by dry gas, and without, it is asserted, the smallest injury to the cargo.

The question of protecting the timber employed in the building of ships by rendering it fireproof was also discussed. [FIREPROOF TIMBER.]

1876.—Before the Chemical Section of the Glasgow Philosophical So. there was read, in the early part of this year, by Mr. D. Cargill, of Dundee, a paper wherein he treated first of a simple means of preventing fires on board ship, and next of the means of extinguishing them should they arise. As to the first he said: Before cargo is put on board place planks along the bottom of the hold, to make an open space about 1 ft. square; lead a 3 in. diameter cast-iron pipe from this open space to deck, which can be closed with plug screw flush with deck till wanted; have one of these pipes every 50 ft. length of ship. On deck have an ordinary blast fan about 12 in. diameter—may be more or less as required; attach to this fan one end of a flexible hose, an ordinary 3 in. canvas hose will do; the other end attach to the top of the cast-iron pipe. When ventilation is wanted, work the fan by hand, wind, or steam power, which will blow through the ship any quantity of air to purify the gas arising from coal cargo, or expel any sweat [vapour] arising from other cargoes.

As to the means of preventing fires by counteracting the ignitable and inflammable tendency of gas-emitting cargoes, Mr. Cargill said:—For this purpose an earthenware, fire-clay, or metal vessel, or even an empty cask, is placed upon the deck or other convenient part of the ship, into which a quantity of broken chalk, marble, bicarbonate of soda, or other carbonate, is placed. The vessel is formed with two openings or necks; but any suitable form of vessel may be employed. To one neck a flexible pipe composed of gutta-percha or other suitable material is attached and secured to a vertical pipe. Into the other neck or opening of the vessel a syphon pipe, formed with a funnel or mouth at its outer end, is inserted; and it, together with the flexible pipe, is luted with putty, or otherwise fixed in a manner to prevent escape of gas from the vessel. Through the syphon pipe a mixture of sulphuric or muriatic acid and water, acid salt, or dry acid dissolved in water, is poured into the vessel, which mixture acting on the chalk or other carbonate, liberates carbonic acid gas, which is conducted through the flexible pipe into one of the vertical pipes, and is thereby conducted to the bottom of the ship's hold, where, combining or commingling with the gases arising from the coals or other gaseous or inflammable cargoes, the carbonic acid gas destroys the combustible tendency.

[FIRE ANNIHILATORS.] [FIRE EXTINGUISHMENT.]

FIRES (AND FIRE INS.), STATISTICS OF.—The contents of this art. must be regarded as supplementary to the series of other arts. we have already furnished on the subject of Fire Ins. It appears to be one of the wants of the bus. that there should be accessible to all, the results of the bus., or of different classes of the bus., over given periods. It is wonderful how, without any such aid, the fire underwriters achieve general success. This can only be accomplished by continued strain upon the powers of observation. Even this, however, is more to be commended than a blind reliance upon mere figures, however carefully compiled. The bus. is one requiring continued watchfulness and ever-growing knowledge. [FIRE UNDERWRITERS.] We trust the facts we shall here bring together—disjointed as they must inevitably be—may yet prove of some value even to the best informed. It will be seen later in this art. the fire underwriters of the U.S. are seeking to place the bus. more on a statistical and scientific basis. [1874.]

Those familiar with statistical inquiries will readily appreciate the difference in money values between the earlier dates in this art. and those of our own time, and will make the required allowance. We have not attempted any correction in this regard. In the cases of statistics of foreign countries we have usually given, for purposes of uniformity, approximate sterling values.

1667.—Fire pol. are believed to have been first issued in London during this year. In our art. FIRE INS., HISTORY OF, we have given several estimates of the number of houses existing in London at certain dates named [see 1675, 1678-9, 1679, 1680, 1681]. It is prob. that *The Fire Office*, "on the backside of the Royal Exchange," issued fire pol. in 1680. It is certain that the Corp. of London issued many in 1681. From this date the issuing of pol. went on steadily. We have no actual returns of the aggregate amounts insured until a century later; although, as will be seen, we have the returns as to individual offices before the middle of the next century. If we consider that the bus. of fire ins. began in earnest in 1682, we shall hereafter see that by 1782 the sum insured

was £130,000,000. Assuming this sum to have been steadily progressing during the preceding century, it gives a ratio of progress of £1,300,000 p.a. This is to be regarded as approximate only, as no doubt the ann. increase in the later periods was much greater than in the earlier ones.

1694.—By the 5 Wm. & Mary, c. 21 (sec. 3), stamp duty was first imposed upon Pol. of Ins. (of all kinds); but as the sum of 6d. then imposed was to be charged upon all pol. irrespective of the amount insured thereunder, it is clear that no statistics other than of the number of pols. issued could be obtained from its operation. As a matter of fact, no separate return was kept prior to 1809 of the stamp duty received on fire pol., as distinct from marine or life pol. The successive increase and subsequent changes in this stamp duty have been set out in detail under FIRE INS. POL., STAMP DUTY ON. (See 1782.)

1739.—Maitland, in his *History of London*, pub. this year, endeavours to form an estimate of the value of house property within the B. of Mort., and, in doing so, gives us the following interesting details:

The number of houses within the B. of Mort. at present insur'd in the *Hand-in-Hand* Fire Office amounting to 42,676, the same are insured at £9,231,400; and the number within the said district in the *Westminster* Fire Office being 7852, they are insur'd at £2,059,121, which makes the number of houses 50,528, and the sum ins. thereon £11,290,521. He adds:

I endeavour'd to obtain accounts from the other fire offices, but not succeeding, I shall, by the help of the above, attempt to show the constructive value of all the houses within the B. of Mort. . . .

But first 'twill be necessary to acquaint the reader that the several fire offices, to prevent their being impos'd upon, insure (at most) only three-fourths of the value of each house; which fourth part un-insur'd being added to the aforesaid sum, 'twill increase the same to £15,054,028, which is the constructive value of all the said houses. But as the number total of all the houses within the B. of Mort. amount to 95,968, the value of the said houses, according to the aforesaid method of calculation, must amount to the sum of £28,592,463 6s. 10½d.

He had taken very considerable pains to ascertain the total number of houses in the city, and we think with success—therefore his estimate is entitled to reliance.

1776.—Dr. Adam Smith, in his *Wealth of Nations*, pub. this year, supposed that, "taking the whole Kingdom at an average, 19 houses in 20, or rather, perhaps, 99 in 100, were not insured from fire." Book 1, c. 10.

1782.—The ann. per-centage duty on sums insured under fire pol. was first imposed this year, under the authority of 22 Geo. IV. c. 48; and by its aid we are enabled to deduce statistics of real value regarding the amount of fire ins. from time to time in force. The rate of duty was 1s. 6d. for each £100 annually insured. The subsequent increase and variations in the rate of this duty have been already set out in detail under FIRE INS., (PER-CENTAGE) DUTY ON.

1783.—The amount of per-centage duty received for the fiscal year terminating 1st Aug. this year was £142,822, representing the sum insured as £130,000,000. The rate of per-centage duty, as we have shown, was 1s. 6d. per £100 insured for one year. But there was in add. a pol. stamp of no less than 8s. 6d. on town pol. of £1000 and upwards, and of 10s. 6d. on country pol. of like amount. [Mr. Coode makes it 11s.] So that the insured was charged on an average, say 9s. 6d. for the instrument under which he was to contribute 15s. p.a. to the revenue so long as it continued in force. This is a specimen of the statesmanship of Geo. III., of which we sometimes hear so much laudation! The inducement to a man not to insure was made two-fold. The per-centage duty steadily fell off down to 1786, when it realized only £99,587. It then began to recover, but did not reach its orig. amount until 1793. Mr. Coode, in his Rep. to be afterwards [1856] spoken of, estimates the loss to the Gov. by the impolitic pol. stamp as not less than £540,000!

1786.—By 26 Geo. III. c. 82 (sec. 9), all *foreign property* situate in countries at peace with Gt. Brit., but ins. in British offices, was exempted after 5th July this year from the per-centage duty. It was estimated that this caused a falling off of about £2100 p.a., representing insurances amounting to £2,800,000.

By 26 Geo. III. c. 3 of Stat. of Irish Parl., a stamp duty of 2s. 6d. was imposed upon all pol. of ins. issued in *Ireland*.

1787.—The first separate return of per-centage duty received in *Scotland* was made. It amounted to £1315, representing in sum insured £1,753,300.

1797.—By 37 Geo. III. c. 90, two fiscal changes were made in regard to fire ins. The stamps on pol. were reduced as follows: under £1000, 3s.; £1000 and over, 6s. All distinctions between town and country pol. were abolished. At the same time the per-centage duty was increased to 2s. p. £100 p.a. From this date up to 1804, when other changes were made, the increase in sums insured averaged about 6 millions p.a.

1802.—Sir Frederick Morton Eden, founder of the *Globe* Ins. Co., made an elaborate estimate of the amount of insurable property in *Gt. Britain and Ireland* at this date. His calculation then was that £612,975,000 [his figures were *twelve millions* less through error in casting] represented the approximate value, while £223,000,000 only were then insured. The following is an abstract of the items constituting the data on which his estimate was founded:

*Estimate of the Value of Property Insurable from Fire in Great Britain and Ireland,
A.D. 1802.*

1. Value of houses, including machinery, in <i>England and Wales</i>	£240,000,000	
Do. in <i>Scotland</i> , one-eighth of the above	30,000,000	
	<hr/>	£270,000,000
2. Furniture in <i>England and Wales</i>	£120,000,000	
Do. in <i>Scotland</i> , one-eighth	15,000,000	
	<hr/>	£135,000,000
Stock of goods in hand, exclusive of furniture:		
Clothes	£15,550,000	
Plate	10,000,000	
Jewels and trinkets	5,000,000	
Clocks and watches	2,000,000	
Books	5,000,000	
Wine and other liquors	2,000,000	
House and table linen	3,000,000	
Horses and carriages	2,000,000	
Miscellaneous articles	5,450,000	
	<hr/>	50,000,000
Scotland, say one-tenth	5,000,000	
	<hr/>	55,000,000
		190,000,000
3. Agricultural stock, including wheat, barley, rye, oats, beans, rape, hops, hay, etc., value at least	52,000,000	
Of which total there would be insurable at an average (deducting what might be consumed from to time) to the amount of		32,500,000
4. British manufactures for home consumption:		
Woollen	11,000,000	
Cotton	6,000,000	
Leather	12,000,000	
Flax	2,000,000	
Hemp	2,000,000	
Glass	2,000,000	
Paper	1,500,000	
Porcelain and Pottery	2,000,000	
Silk	3,000,000	
Hardware	6,000,000	
Beer	10,000,000	
Spirits	4,000,000	
Soap	1,500,000	
Salt	1,000,000	
Candles (wax and tallow)	2,000,000	
Various articles, as carriages, etc.	10,000,000	
	<hr/>	76,000,000
British manufactures for exportation	40,000,000	
Foreign merchandize in Gt. Brit.	40,000,000	
	<hr/>	£156,000,000
Of which total about one-fourth is insurable		39,000,000
Works of art, pictures, etc.		10,000,000
5. Shipping: 1,725,940 tons	20,000,000	
Plantation ships: 240,786 tons	2,000,000	
Ships on the stocks	1,000,000	
	<hr/>	£23,000,000
Of which suppose one-fourth insurable		5,750,000
Minerals, river craft, public buildings, arsenals, etc.		10,000,000
	<hr/>	55,750,000
Total insurable property in Gt. Brit.		55,725,000
Insurable property in <i>Ireland</i> supposed to be one-tenth of that of Gt. Brit.		5,572,500
	<hr/>	£612,975,000

1804.—Sir John Sinclair, in his *Hist. of the Revenue*, pub. this year, adopts the preceding estimate, with the exception of the last two items of 10 millions each (and some corresponding deductions), making his total £590,975,000. He says, "There is every reason to believe that the above [modified] estimate is not over-rated."

This year, by 44 Geo. III. c. 98, two further fiscal changes in regard to fire ins. were made. 1. The stamp duty was reduced to a uniform charge of 1s. upon all pol. 2. The per-centage duty was increased from 2s. to 2s. 6d. per £100 insured. This measure extended to *Ireland*, where no per-centage duty had previously been charged. (See 1806.)

The increase in the amount of property insured from this date up to 1815, when further changes occurred, averaged about 10 millions p. a.

The amount yielded by the 1s. stamp on the pol. has been given, from the year 1809, in our art. FIRE INS. POL., STAMP DUTY UPON.

1805.—The first return of per-centage duty for *Ireland* (under the Act of last year) was made this year. The sum so collected for the fiscal year ending 5 Jan. was £7274, representing a sum insured of £5,819,200. The Act had prob. hardly got into complete working, for the amount decreased for each of the two following years, and then suddenly ran up to £15,142, representing as the sum insured £12,113,600; and it still continued rapidly to increase. See T. at end of art. FIRE INS., (PER-CENTAGE) DUTY ON.

1806.—The fires in Lond. for the year ending Sept. 29 were 552, viz. 366 alarms, attended with little damage, 155 chimneys on fire, and 31 serious fires. Hone, in his *Table Book*, says: "The offices calculate on an alarm of fire every day, and about 8 serious fires in every quarter of the year."

1815.—By 55 Geo. IV. c. 184 (sec. 32 to 36 inclusive), several further fiscal changes in regard to the per-centage duty on fire ins. were made. 1. The rate of duty was increased to 3s. p. £100 insured, as from 28 Sept. 2. Ins. on public hospitals and property in any *foreign kingdom* or state at amity with H.M., his heirs and successors, *exempted from duty*. 3. Duty on *Colonial Ins.* increased to 5s. p. £100. The stamp duty on fire pol. remained unchanged as to home ins., viz. 1s. p. pol. For colonial ins. it was increased to 2s. 6d. p. pol.

The per-centage duty after the passing of this Act up to 1833, when other changes were made, continued largely progressive.

1816.—By 56 Geo. IV. c. 56, the per-centage duty on ins. in *Ireland* was continued at 2s. 6d. p. £100, instead of the increased rate of 3s., which applied to the remainder of the U.K. under the Act of last year.

1828.—At this date was founded the *Royal Standard Friendly So.*, and among its features was that of granting to its members protection against loss of their effects by fire to the extent of £15 each. In taking this step the So. was but following the example of the earlier gilds. The result of the operation of this So. over a series of years will be found under F. SOS. at this date. It will be remembered that these sos. could not have undertaken this branch of ins. but from the fact of being exempted from all stamp duties.

1829.—Mr. Braidwood, in his *Fire Engines*, etc., pub. in *Edinburgh* in 1830, gave the following statistics regarding the fires, etc., in that city. The number of houses, shops, and assessable places within the bounds of the police was 29,000. The fires, etc., in the following years ending 30th Sept. were:

YEAR.	Totals.	Entire Loss.	Considerable Loss.	Trifling Damage.	Foul Chimneys.	False Alarms.
1825	48	11	12	14	9	2
1826	80	7	18	31	17	7
1827	113	1	12	55	39	6
1828	94	1	18	43	28	4
1829	194	1	9	56	118	10

He says: In examining the above table, it will be observed that serious fires decrease as the number of alarms increase. "The cause of so many false alarms in 1828-9 was that a considerable number of fires having been observed to arise from foul chimneys, the firemen were sent to every one from which the slightest danger was apprehended."

In *Paris* the number of houses at this date was supposed to be 26,000. The fires over an average of 20 years had been 540 p. a., or rather more than 2 fires p. 100 houses. But on account of the efficiency of the corps of *Sapeurs Pompiers*, it was believed that only 1 house out of every 500 which caught fire was actually burned.—*Braidwood*, p. 132.

1833.—By 3 & 4 Will. IV. c. 23 (sec. 6), all per-centage and other duty (pol. stamps) was abolished on fire pol. on *agricultural produce*, and on implements of husbandry (not being fixed machinery or buildings), usually designated *FARMING STOCK*. As nearly as could be ascertained, the aggregate amount of ins. so released from duty was in the U.K. about 36½ millions stg. In future all such ins. were to be made under

separate pol., and returned distinctly by the fire office. In this manner valuable statistics were obtained. These have been given under FARMING STOCK INS.

On the 1st Jan. this year the London Fire Engine Estab. came into existence. [FIRE BRIGADES.] The records of its 33 years' working will be given under date 1865. The number of fires in Lond. in each of the intermediate years from this date downward will be shown.

1836.—There were at this date 5 proprietary ins. cos. in France. The sum insured by them was returned at £440,930,040. The wonderful development of fire ins. in that country will be shown under FRANCE, sub-heading Fire.

1838.—The first vol. of the *Journal of the Statistical So. of London*, pub. this year, contained an art., *Fires in Lond., with an Account of the Lond. Fire Engine Estab.* It was written by Mr. R. W. Rawson, and embodies the first systematic inquiry into the statistics of fires of which we have any knowledge. Its value has now, however, been superseded by the more complete details we shall be able to present under date 1865. He made inquiries regarding the insurance in the case of 1065 fires happening in 1836-7 with the following results :

Building and contents insured.....	342 = 32 p.c.
Building only.....	120 = 11 „
Contents only.....	180 = 17 „
Neither insured.....	423 = 40 „

“If this calculation (he says) holds good for the whole of London, two-fifths of the houses in the metropolis are entirely uninsured, and one-third only are insured for both the buildings and contents.”

This year, by 1 & 2 Vict. c. 56 (sec. 96), ins. on *workhouses* in Ireland, effected in pursuance of order of the Poor Law Commissioners, were exempted from duty. This fact has to be kept in view in dealing with the statistics of fire ins. in Ireland at and after this date.

1841.—An inquiry was instituted by Mr. Wm. Baddeley, C.E.—well known in connexion with his efforts in saving life from fire—into the proportion of burned properties in Lond., including the buildings and their contents, with the following results :

In 1841.	Insured.	Not Insured.	Unknown.	Total.	Proportion Ins. p.c.
Buildings	914	197	10	1121	81·53
Contents	609	404	12	1015	60·
	1523	601	12	2136	71·30

Thus 81½ p.c. of the number of buildings were insured, and 60 p.c. of the contents ; and of either one or the other, out of the total cases by fire reported, about 71½ p.c. ; leaving 28½ wholly uninsured. The proportion of the value insured was not reached by this inquiry. (See 1838 and 1850.)

1842.—Mr. Lewis Pocock, in his *Familiar Explanation*, etc., pub. this year, offers the following obs. regarding the use of statistical inquiry in view of fixing the proper rates for fire ins. :

Throughout the kingdom fires are found to bear a constant relation to the number of houses standing in the part where they occur ; and, as a natural consequence, the amount of the property destroyed is paid to the insured out of the sums subs. for the security and indemnity of those who remain unhurt. By ascertaining, therefore, the number of houses in any particular district, and the number of fires known to have occurred there in a given space of time, a certain proportion is found for that period. Not that such a general result is ever supposed to be precisely accurate, but that it approaches to accuracy sufficiently near to furnish what is properly termed an average, upon which calculations may be safely founded. In the materials for forming this average, however, to arrive at anything like a true result, the casualties must not only be numerous, but the time embraced for their occurrence must also be of considerable extent.

In support of which position he proceeds :

For if in a town consisting of 1000 houses it were found that 1 had been accidentally burned down in a particular year, the true inference would not therefore be that the proportion of fires in that place was 1 in 1000, since in the 10 previous years there might not have been any, or there might have 10 houses destroyed yearly. But if it were ascertained that in those 10 years 1 house on the average had been burned annually, the proportion of 1 to 1000 would appear prob. ; and if the same rate were found to continue for 20 or 30 years following, it might be adopted as a safe general estimate, and the charge for security and indemnity might be prudently calculated upon it.

The number of fires about this date in *Liverpool* had become so large, and their character so serious, that the rates of prem. went up from 8s. to 30s., 40s., and in some cases to 45s. p.c. It was calculated that the losses by fire from the commencement of the century in this borough had amounted to about 3½ millions stg. [FIRE PROTECTION, 1843.]

1841-4.—In *Knight's London* occurs the following passage : “The statistics of Lond. fires are by no means devoid of interest, and the time may come when they will form an index to the social advancement of the people ; for in proportion as houses are built more and more fireproof, and habits of carefulness become more and more diffused, the number of destructive fires will assuredly lessen.”

1844.—In *Denmark*, in the 17 years from 1827–28 to 1844, the sum insured by the Gov. against fire on buildings in towns increased from £3,122,857 to £4,457,142, being an increase of nearly 42·7 p.c. The average losses during that period amounted to '180, or 3s. 7d. p.c. The sum insured on buildings in the country increased from £14,980,000 in 1827–28, to £18,928,571 in 1844, about 26·36 p.c. in the 17 years. The average losses thereon amounted to about '187, or 3s. 9d. p.c. p.a. on the sum insured. For more complete details, see COPENHAGEN, and DENMARK.

1845.—Mr. G. R. Porter, in his *Progress of the Nation* (ed. 1847), gives the following returns of the sums insured against fire in the 3 divisions of the kingdom at the following dates, and the per-centage of aggregate increase :

YEARS.	England.	Scotland.	Ireland.	United Kingdom.	Per-centage of Increase on 1801.
	£	£	£	£	
1801	219,623,954	3,786,146	8,832,125	232,242,225	.....
1811	340,296,000	13,106,400	13,302,400	366,704,800	57·89 p.c.
1821	381,406,000	13,824,666	12,806,666	408,037,332	75·69 "
1831	473,073,333	34,109,333	19,472,666	526,655,332	126·77 "
1841	605,878,933	44,655,300	31,005,606	681,539,839	193·45 "
1845	640,680,500	47,122,900	34,277,900	722,081,300	210·91 "

1847.—Mr. W. E. Hillman, then Act. of the *Star Assu. Office*, pub.: *Illustrations of the Theory and Practice of Assu.*, wherein he seeks to apply the Theory of Probabilities to the business of F. Ins., drawing his illustrations mainly from the fires in Lond. during the 10 years 1836–45. He says :

The theory of prob., as far as ins. is concerned, is based on registers of facts, and goes on the simple presumption that what has happened before may and most prob. will, under similar circumstances, happen again. Applying the doctrine to the case of fire, let us suppose that sos. were formed by each of the following trades for the purpose of mutual protection against fire in Lond. in the year 1845. Presuming the number engaged in each trade to be correctly stated in the Directory, we should have the following numbers associated in each so., viz. :

Bakers' So.	2251 members	Printers' So.	648 members
Carpenters' do.	1360 "	Publicans' do.	4336 "
Linen Drapers' do.	815 "	Wine Merchants' do.	910 "

Let the average number of fires that have happened in the 9 years before 1845 be taken as the prob. number of fires that will happen in each trade, or, which is the same thing, the number of claims which will be made on the funds of each so. in the year 1845; then the following fractions will express the prob. of the event occurring to any individual member of the so., and his proportion of the total fund to be raised to meet the claims. [We give the short results only.]

Bakers' So.	1 to 161	Printers' So.	1 to 130
Carpenters' do.	1 to 50	Publicans' do.	1 to 131
Linen Drapers' do.	1 to 48	Wine Merchants' do.	1 to 151

Applying the *actual experience* of the year 1845 to the same sos., we have the following fractions, which are the representatives of the actual experience. [We give the short results again.]

Bakers' So.	Experience 1 to 145	Theory 1 to 161
Carpenters' do.	" 1 to 72	" 1 to 50
Linen Drapers' do.	" 1 to 41	" 1 to 48
Printers' do.	" 1 to 130	" 1 to 130
Publicans' do.	" 1 to 140	" 1 to 131
Wine Merchants' do.	" 1 to 130	" 1 to 151

If instead of 6 independent sos., all the cases had been taken to a general ins. office, the experience of that office would, on the aggregate, have departed but very slightly from the result estimated by the theory of prob. Whilst the theorist would have said, "Your fires in these 6 kinds of risks will prob. be 671 in the next year," the *actual experience* of the office would be 658, only 13 short of the number brought out by the theory—a difference of only 2 p.c.

He adds :

These results are, however, no exponent of the prems. which ought to be demanded for ins. by offices, for, although the number of fires happening in a given time is nearly certain, yet there are other considerations to be taken into account. From the statement, page 19 [this we have not given], it is shown that only 4·4 p.c. of fires are total losses; 29·4 p.c. only considerably damaged; whilst 66·2 p.c. (more than half the number) are attended with only trivial losses. Although the above proportions would seem to guide the calculations of prems., yet the loss of an office does not follow the ratio indicated above, inasmuch as the *total losses to an office are much greater than indicated, from the fact that persons do not insure usually to the full value of their property.* Suppose the mass of pol.-holders insured half the value of their property, it will be evident that the second class, of *half losses*, would prove to be *total losses* to the co. under the pol., as the sum insured would be entirely exhausted to pay the partial loss to the insured person.

The writer was here assuming that the Average clause was never brought into play.

1848.—The writer of an art. in *Tail's Magazine* this year offered the following obs. :

There are returns of the accidents and losses by fire in large towns, which show a remarkably close average (annual) both as to the number of these calamities, and the value of the property destroyed in them. It would almost appear that there is a *natural law of negligence* which leads ann. to the same or nearly the same number and value of fires. We do not assert that every accident of this nature originated in negligence. Examples frequently occur where human prudence could scarcely have foreseen the beginnings of destruction. Fires on ships at sea, although the risk from carelessness in these wooden houses on the waters seems to be trebly hazardous, are yet most frequently the result of spontaneous combustion. The increase of science will tend to the adoption of wiser precautions in the stowage of cargoes to diminish the numbers of these—the saddest and most terrible of all the accidents by fire. A very large proportion of the accidental fires in barn-yards originate with

spontaneous combustion, though they also may be directly traced to some carelessness in the examination of the produce before it was stacked. From whatever causes fires originate, there is apparently a nearly equal ann. average; and although that cannot be traced to the distinct laws which form the basis of life assu., yet the fire assu. sos. need not proceed, and they do not proceed on mere assumption in calculating their risks, and in fixing their prems.

During this year (1848) there were 7 proprietary fire ins. offices existing in Belgium. These had in force ins. for £57,128,424; the ann. prems. thereon amounted to £49,278, being at the rate of '085 p.c.; the losses were £26,881, being at the rate of '047 p.c. on the sum insured, or 54'55 p.c. on the prems.; and the expenses were, including commission, etc., £17,028, being 34'5 p.c. on prems. Many other details of interest will be found under BELGIUM.

1850.—Mr. Samuel Brown contributed to the *Assu. Mag.* [vol. i. p. 31^{*}] a paper: *On the Fires in London during the 17 Years from 1833 to 1849 inclusive, showing the Numbers which occurred in Different Trades, and the Principal Causes by which they were Occasioned.* Mr. Brown speaks of it as very remarkable that fire and marine risks had been almost wholly neglected as matters of statistical research. He does not, he says, by this remark intend to convey an impression that the system on which fire offices are conducted is in the least degree deficient in that experience on which such important affairs must mainly depend, or that the skill of the managers is inferior to that which is required in the bus. of life assu.; but whilst the facts connected with the assu. of life have been recorded and pub., and whilst they have thus led the way to many new and important applications of the doctrine of prob., those of fire and marine ins. had never been made public.

He further says: The immense collection of data which must have been gathering for upwards of 130 years, in the books of some of the older cos., would present many very curious results, both as to the actual facts regarding the frequency and the extent of damage by fire, as well as to the changes in the values of property of various kinds in all parts of the kingdom. He thought it might be too much to expect that private cos. should make their affairs public for the sake of any vague and undefined good which the speculator may deem will result to general science or political economy, by the knowledge which they have acquired in the way of bus., and which is exclusively their own. It was prob. however that not only would no injury result to the cos. from the publication of their experience; but on the contrary the greater satisfaction and confidence of the public would amply repay the trouble and expense, whilst a vast and novel field of obs. would be open to the inquirer. Finally, the data of the fire offices would possess this advantage over the data of the life offices, viz. that a very few years serve to form a sufficient average, since their progress can be observed from year to year, whereas in the latter the whole duration of life of all the individuals existing at a given time must be followed out to allow of any sound conclusions being drawn from the obs.

With these considerations and suggestions, he introduces us to the results of his investigations into the data recorded by Mr. Braidwood, the then Supt. of the Lond. Fire Engine Estab., during the 17 years 1833 to 1849 inclusive. As we propose, however, at a later date [1865] to deal with the more complete returns obtained from the same source, we do not follow Mr. Brown in this division of his inquiry.

His next point is the increasing per-centage of ins. to fires, in the investigation of which he had been aided by Mr. Baddeley's reports from 1836 to 1849. The following T. gives the results over several periods:

Proportion Per Cent. of Insurances ascertained to have been effected in Cases of Fire.

	1836 to 7.	1838 to 42.	1843 to 7.	1848 to 9.	Whole Period. 1836 to 49.
Buildings and Contents.....	32'11	37'33	37'73	41'27	37'58
Buildings only	11'27	14'37	16'23	17'22	15'24
Contents only.....	16'90	15'49	14'30	12'54	14'69
Neither	39'72	32'81	31'74	28'97	32'49
	100'	100'	100'	100'	100'

These particulars relate exclusively to property in which the fire originated, not comprising the cases in which damage was done to the contiguous premises. Mr. Brown says hereon:

Thus it appears that on the average of the whole period, 67½ p.c. have been insured in some way or other, and 32½ p.c. not insured at all, and that the proportion not insured at all has diminished from nearly 40 p.c. in the first period, to 29 p.c. in the last; whilst of those who have had the prudence to insure both buildings and contents, the proportion has increased from 32 p.c. in the first, to upwards of 41 p.c. in the last period. Even the gradual increase of the "buildings only" insured, compared with the diminution of "contents only" insured, is probably a favourable feature, since buildings may, in most cases, be presumed to require larger ins. than the contents, except in the case of some particular trades. This is a question, however, which, though interesting to the political economist in estimating the increasing wealth or prudent habits of the people, can only be answered by the ins.

the combination of facts, which I fear it will be some time before we can expect to have together, or the results made public. The proportions given above are deduced from the fires, as stated above, only as regards the buildings in which they commenced.

We already had returns of this character, from other sources, under dates 1838

own proceeds to say that it was generally estimated that there were in Lond. at 300,000 houses, and taking the number of fires at 800, it gave $2\frac{3}{4}$ to every house. Taking the proportion of "total losses" as 4, "seriously damaged" as "slightly damaged" $66\frac{1}{2}$, as they had been found to be from 1833 to 1849, it would be an average payment of £1802.5 to every 100 fires; and "which, being by $2\frac{3}{4}$, would for each 1000 houses insured for £100 each show a loss of £4806, s. p.c." He adds:

that on an average only half the property was insured, it is evident that the premiums paid must be increased by one-third. These rough calculations are independent of all interest on cap., etc. Many other points would be necessary for consideration in preparing data for such a purpose. Thus, no doubt, the locality, the construction of the building, the distance from a fire engine station, and still more the manner in which an adjoining building was affected by a fire breaking out in a neighbour's house, would have to be considered. A fire so situated, and being the cause of serious damage, which could not be attributed to the trade carried on in the dangerous proximity of other trades. Still, all these cases would form averages in the amount of damage inflicted by a fire in one trade on the houses adjoining, and on such facts would bring together subjects of curious and eventually useful inquiry. I took out some of the principal trades (as Mr. Hillman had done), and from the Directory the numbers engaged in those trades in 1846, found the percentage of fires to be as follows:

Oil makers	30.00	Oil and colourmen	1.56
Beersellers	16.51	Beersellers	1.31
Booksellers	7.74	Booksellers	1.18
Coffee-shops and Coffee-houses	3.88	Coffee-shops and Coffee-houses	1.25
Licensed victuallers... ..	2.67	Licensed victuallers... ..	.86
Bakers	2.42	Bakers ... ..	.75
Wine-merchants	2.27	Wine-merchants ... ..	.64
Grocers	2.12	Grocers ... ..	.31

In some of these trades a tendency to a diminishing ratio of fires.

at this date 4 fire ins. cos. had insured £9,747,796. We shall give other details about this date, perhaps a year or two later, a meeting of some of the then

s. cos. in the U.S. and in Canada, transacting "agency bus.," was held in London, considering "the ruinous results that had attended the transaction of fire ins. at 20 years in the U.S. and Canadas, and to devise some means for protecting the bus." As a result, a Committee of 5 was appointed to "ascertain the

present condition of the bus. of fire ins., and what has been the result of the bus. since the estab. of fire ins. cos. in the U.S." We take the following passages from the Rep. of this Committee:

From the information which the Committee have been able to obtain, it appears that the bus. of fire ins. against fire in the U.S. from the commencement to 1810 was profitable.

During the 20 years that followed 1810 there were many new cos. estab. with cap. of 200,000 and 300,000 dol. The desire to do a large bus. without waiting to obtain it by a careful and judicious selection of risks at sufficient premiums, as the old cos. had done, induced the new cos. to engage in a strife to obtain the risks that were under ins. by the old cos., by reducing the rates of prem.; thus compelling the old cos. to follow their example or be deprived of their bus. The effect of this unwise competition was to bring down premiums so low that the aggregate amount was not sufficient to pay the ordinary losses. The old cos. continued to pay their semi-ann. dividends by applying the int. on cap., and when necessary as much of the surplus as would make with the interest the amount required. It is well known that the surplus of the old cos. of the City of N.Y. was much diminished during this period. The statistics of fire ins. bus. in the U.S. will show that in the period of 20 years commencing with 1811 and ending with 1830, it did not produce an average profit of 3 p.c. p.a. on the cap. employed.

The bus. of the 20 years commencing with 1831 and ending with 1850 exhibits a very discouraging result. The whole of the premiums received for the ins. of property in the U.S. and Canadas during this period, and many millions of cap., were required to meet the losses. *Many of the stock cos. and all the mutuals were ruined.*

Taking together the whole of the bus. of fire ins. in the U.S. and the Brit. Provinces of N. America for the period of 60 years from 1791 to 1850, it will be found *not only has there been no profit, but a very large loss of cap.*

It may be said by those who have not made themselves acquainted with the statistics of the bus. that this unfortunate result was occasioned by the great conflagration in the City of N.Y. in 1835; that the recurrence of such a calamity ought not to be expected and cannot be provided against by ins. This is an error. If the amount of property insured in N.Y., and the amount destroyed, be compared with that in Albany, St. Louis, and other places, and in villages in which extensive fires have happened, it will be found that the destruction in the City of N.Y. in 1835 has been surpassed in other places. We have statistics to show that the bus. in smaller cities and villages for many years has been unprofitable. The whole of the premiums received in Western N.Y. and in the N.W. and S.W. States in the last 10 years have not paid the losses by 25 p.c.

Rates of prem. that are sufficient to meet the aggregate losses can only be ascertained by the experience of many years; there is no other safe guide for the transaction of this bus., and he who attempts it without this guide, trusting to his own judgment, or to the results in cities and villages that have escaped large losses, will be disappointed. Such fortunate periods have happened to all

the cities and villages that have sustained the largest losses. *A similar adverse fate will prob. come heavily upon cities and villages that have heretofore been exempted.*

If the amount of prems. made in fortunate years is not considerably more than sufficient to meet the losses and expenses in such years, no fund will be provided to meet great losses in unfortunate years. The deficiency must be taken from the cap. With such management the bus. cannot be sustained—all engaged in it will be ruined.

Subsequent events have most fully confirmed the wisdom of these latter obs.; while they have also materially added to the measure of financial disaster in fire underwriting in the U.S. and in Canada. [See 1874 for later statistics of a similar class.]

1851.—Mr. Samuel Brown presented to the International Statistical Congress held in London this year a paper: *On the Collections of Data in Various Branches of Assurance*, in which occur the following passages:

It may seem strange that, after the bus. of Life Assu. has been conducted in this country by large and influential cos. for nearly 90 years, Fire Assu. for upwards of 150, and Marine Assu. for a still longer period, we should now propose for discussion what are the collections of facts on which our tables are based, and where better information can be procured than that which we now possess. Yet I believe there is no one who has given attention to this subject, who has not felt that the science of assu. is very much in advance of our practical knowledge.

We propose, therefore, to give a hasty glance at the different collections of facts on which the bus. of assu. in its various branches in this country depends; and to take advantage of the happy circumstance which has brought together from all parts of the world men of science, of general intelligence, of liberal views, and enlightened minds, to compare notes of our relative knowledge, and to profit by each other's advance on subjects so important. Happy shall we be if an intellectual intercourse so auspiciously commenced shall lead to a continued and friendly interchange of thought and the results of experience!

After dealing in some detail with the data made available to the science of life contingencies, he reaches "Fire Ins.," and proceeds:

It will be seen from the above remarks that considerable attention has been paid to the collection of facts relating to the duration of human life. But as to observations on the risks of fire ins., no authentic information has been made public by any of the cos., notwithstanding the large number of obs. which must exist in their books. An art. in the *Assu. Mag.* [the art. already reviewed under date 1850] was prob. the first attempt made to bring together the cases of fire which had occurred in Lond. in a form from which any general conclusions could be drawn. In doing so the defects of our knowledge became still more apparent. This is prob. the first step to improvement. It is supposed that there are difficulties in the way of a classification of risks, according to what would appear the natural subdivision of them, namely, the greater or less hazard of the trades carried on in different buildings, or the greater or less liability of certain localities under the heads of these different trades, which would make any just estimation of them nearly impossible. It appears to me, however, that we must not despair, for in the first instance still greater difficulties would exist in procuring data as regards health and longevity. The short period for which fire assu. may be made would in the long run be balanced in the experience of the cos., either by the multitude of risks, or, what would prob. be a still more useful result, by the longer duration of the contracts. There would seem to be *a priori* no adequate reason why the value of an ins. against sickness during life should be a more exact calculation than the chance of a fire during a life. If attacks of sickness always followed the advance to old age, we might see no comparison; but epidemics may attack young and old, the weak and the vigorous; yet we endeavour to classify all these events in minute subdivisions of locality and occupation. Accidents to life or limb may happen from the carelessness of individuals themselves, or the wilful injuries of others; yet we arrange these under their separate causes. Frauds may be possible in all cases; but crime is the exception to the general morality of a country. The prob. occurrence even of crime, so far as it affects attempts upon the property of others, has been gradually reduced to some general laws, the effects of which are capable of calculation; and such as affect the destruction of property are even still more deserving of a close investigation, the facts of which are possessed by the ins. cos. The classification and combining of many thousand facts might, however, prove sufficiently laborious to render desirable only at first a rough estimate of the losses in various classes of risk by fire. For this purpose it would be sufficient to assume that the prems. actually taken show the extreme of risk arising from the combination of dangers resulting from the different causes, which the experience of the valuer is called upon to assess. It is true, that in this way the relative skill and practice of the assessor becomes an element of the valuation; but this may be neglected in the first general collection of facts. The risks might therefore be classified under the different rates of prem. paid p.c. from 1 per 1000 to 1 p.c., and the actual amount ascertained as lost under each class in per-centage of amount insured. The inquiry thus commenced would probably be found sufficiently interesting in the results to be more minutely pursued.

He then proceeds to review the position of ins. in several European countries, etc., of which we give the short results:

United Kingdom.—The total duty received in 1850, in England, Scotland, and Ireland, was £1,171,629 16s., representing a sum insured of £781,086,533, besides £61,805,427 farming stock ins., which is exempt from duty, making a total of £842,891,960. This large amount of ins. is steadily on the increase. Since 1844 it has increased 12 p.c., or 2 p.c. p.a., and in the last 2 years at the rate of 2.785 p.c. p.a.

France.—The progress of fire ins. in France has been most remarkable. The earliest of the existing proprietary cos. was only established in 1819; yet the amount of fire ins. in force, during the year 1850, in the 13 proprietary cos. alone, was £1,038,433,800. Including the 41 mutual cos., it is computed by M. Dubroca, that the total amount of fire ins. in France exceeds £1,318,000,000, the prems. upon which would be about £1,120,000, and the losses in the year about £565,000. [FRANCE.]

Germany.—Herr Masius, who is intimately acquainted with the best information on the subject, gives the following summary of the present amount of assurances in Germany:

About £286,000,000 against the risks of fire by Proprietary Cos.			
"	100,000,000	"	Mutual
"	429,000,000	"	Municipal Asso. assuring
only immovable property.			

Total £815,000,000 against fire. [GERMANY.]

Belgium.—In 10 of the fire ins. cos. the amount ins. in 1849-50 was £121,419,190; the prem. in the year were £129,724; and the losses £56,000.

In *Russia* and in *Russian Poland* there are several assu. cos. both for fire and life. The ins. of buildings by the Gov. in Poland against fire amounts to nearly £16,000,000; but of the cos. at St. Petersburg I can only at present give the returns of one, which, in 20 years to 1847, had insured on an average £14,662,000 p.a.

For a more complete estimate as to the fire ins. bus. of these and other countries, see 1857.

In the *Assu. Mag.* [vol. i. p. 317] appeared an art., *Increase of Fire Ins. in Gt. Brit. from 1844 to 1850*. The facts there given will appear in various parts of this art.

In the *Mechanic's Mag.* of 17th May this year there was contained a Rep. on the fires of Lond. in 1850, by Mr. W. Baddeley, C.E.

1852.—Mr. Horace Binney, President of the Board of the *Philadelphia Contribution-ship*, on the occasion of its Centennial meeting held April this year, offered the following remarks on the calculation of the prob. of fire:

Looking casually at the risk of fire to houses and merchandize, either as to its happening at all, or as to the extent of injury when it does happen, an uninstructed observer might be disposed to say that there is no rule about it: it is a matter of mere chance. There is no such thing as estimating the risk of fire in such a city as Philadelphia, and particularly the extent of loss by fire. A fire happens one day, and it does not happen the next. The element sleeps one month, and rages another. It desolates the city in one year, and is moderate and governable for some years afterwards. It destroys one house or a dozen; it half destroys another house, or another dozen; and it scorches or slightly burns one, or a dozen, or fifty others. The facts are so. There is no doubt about it. Partially observed, they appear to sustain the objection that it is all chance, and that there is no rule about it. But philosophically speaking, there is no chance in the matter. There may be what are called chances of its being so, and not otherwise; but these chances resolve themselves to the observer, after long, extensive, and accurate obs., into what we call *probabilities*; and as effects follow their causes: if the same causes remain, the same effects will follow; and at length a rule may be deduced from this great mass of observations, that deserves the name, and gives the assurance of great or high prob.—that a certain or nearly certain proportion of fires will happen in such a city in a year or other given time; and that a certain proportion of losses, total, severe, or slight, will happen in a given time: a week, a year, or a century; and the average of the whole may be practically ascertained, near enough for the adjustment of prem. upon the whole city, if the whole is insured; or, by a proper calculation of prob. for a portion of the city, if a portion be insured.

But who had this mass of obs. in the early days of the co.? Who among us has made them now, after the lapse of a century? The experience of many years in a single co. may undoubtedly be something; but if we advert to the experience of past days, and especially to the experience of this present day of dividends pretermitted, of undisclosed encroachments upon cap., and of unknown proportions between amounts insured and of capitals or reservations to protect them, we should say it does not amount to much. If all the cos. were to club all their experience, and give it to the public, it might amount to more; but I am not sure that the aggregate would be worthy of entire reliance. The best experience we have is limited in point of time. It is also limited in point of range. I will give my reason for thinking so presently. One thing, however, is certain. If it is not more certain, philosophically, in the case of a co. taking long risks than it is in the case of every ins. co. constantly, from year to year, or month to month, taking short risks, it is at least more apparently certain in the case of such a co. as this, which makes only permanent or perpetual ins. upon brick and stone buildings; and that certain thing is this: that nothing but long-extended and accurate obs. of loss by fire will answer for such a co. as this. One with another the pol. remains upon the building for the whole term of its existence. We insure it, as it were for the life of the house, from 75 to 100 years, more or less; and we take the risk of fire to that house, and of consequent loss for the whole of that time. And so we do of all the houses we insure. Surely, to do that with safety to the co., we should be able to estimate the prob. of loss, not from the occurrence of a few years, but of a great many; of a century even; for such a term, in fine, as will give us a near approach to the law of this species of disaster for the whole time.

The speaker subsequently proceeded to make the following valuable suggestions on the means of collecting obs. in regard to fire risks:

But cannot a rule be obtained by obs. and inquiry? Must we continue in the present state, when few, and it may be none among us, can give a plain and defensible reason for naming a given rate of ins. as that which, if applied to a considerable mass of transactions, will most prob. meet the loss on the kind of property insured for one year, or for 10 years, or for an unlimited term, and also pay expenses and leave a fair profit to the insurers? Cannot the cos., by united obs. accurately and minutely made, and prosecuted for a considerable number of years, come to the knowledge of such facts as will furnish a defensible reasoning for naming a certain prem. for insuring property of a given description against the risk of fire in a given place? It is the opinion of scientific men, I believe, that by observing the course of events extensively and accurately, such knowledge may be acquired, and with it a rule of ins., at least approximately sufficient for practical use. In the opinion of such men it is possible to obtain, what may be called the law of any species of disaster, in the place of obs.; and in regard to fire something like a mort. T.: a table of injury as well as mort. by that element, in the case of houses and merchandize; and its variations in the case of particular trades, and in the different conditions of the agents and apparatus for arresting and extinguishing fires. Even a year's accurate obs. may do something, though perhaps little; ten years' obs. may give a sensible approximation to a rule; and a century may give even the larger variations, the plague and cholera losses, as I have called them. But the time it may take is nothing. The obs. should be begun at once, and never cease, because new circumstances are constantly occurring to increase or diminish the risk of fires; and all of the phenomena should be constantly and regularly observed. It is the duty of the present day to begin. It will be the duty of that which succeeds to follow on. We should constantly keep company with all the changes in the place, its extension, the heights and materials of its buildings; the merchandize contained in them, and its liability to spontaneous combustion and explosion; the nature and management of dangerous trades; the character of the firemen and their apparatus; the methods of warming and lighting the dwellings and warehouses; even such matters as the matches and means of kindling a light—the loco-focus and lucifers which are one of our most operative dangers; in fine, daily and regular obs. should be applied to everything that can be supposed to affect either the occurrence of fire or its intensity. All these things should be observed in their results from time to time, continually. Is there any doubt that this can be done—I mean, that the obs. may be made? There is none whatever, and it cannot demand an expenditure

which the united cos. cannot both conveniently and profitably afford. Is there any doubt that a close approximation to a true rule for the future may be so obtained? Upon the authority of wise persons, I believe there is none.

1853.—Under FARMING STOCK INS. at this date, we have given the results of an investigation into the causes of 128 fires which occurred during 11 months this year.

1854.—In the *Quarterly Review* for Dec. this year [vol. 96, p. 1] there was an art. on *Fire and Fire Ins.*, wherein a very general idea of the leading facts and statistics upon the subject is given in an amusing and instructive manner. The following will suffice as an example:

Among the more common causes of fire (such as gas, candles, curtains taking fire, children playing with fire, stoves, etc.) it is remarkable how uniformly the same numbers occur under each head from year to year. General laws obtain as much in small as in great events. We are informed by the Post Office authorities that about 80 persons daily drop their letters into the post without directing them; we know that there is an unvarying per-centage of broken heads and limbs received into hospitals; and here we see that a regular number of houses take fire, year by year, from the leaping out of a spark, or the dropping of a smouldering pipe of tobacco. It may, indeed, be a long time before another conflagration will arise from a "monkey upsetting a clothes horse," but we have no doubt such an accident will recur in its appointed cycle.

Although gas figures so largely as a cause of fire, it does not appear that its rapid introduction of late years into private houses has been attended with danger. There is another kind of light, however, which the ins. offices look upon with terror, especially those who make it their business to insure farm property. The assistant sec. of one of the largest fire offices, speaking broadly, informed us that the introduction of lucifer matches caused them an ann. loss of £10,000! . . . How much, again, must lucifers have contributed to swell the large class of conflagrations whose causes are unknown! Another cause of fire, which is of recent date, is the use of naphtha in lamps—a most ignitable fluid when mixed in certain proportions with the common air. . . .

1855.—At the International Statistical Congress held in Paris this year, it was recommended to collect the statistics of all branches of ins., in such a form that the progress of nations therein might be compared. A similar recommendation has been made at some of the later Congresses, but the task is a difficult one, and a plan suited to the views and requirements of all the nations has to be agreed upon. (See 1872.)

The total sum ins. in the *Sun Fire* this year, as calculated from the duty returns, was £140,442,000. This prob. was below the actual amount, unless the short-term ins. were spread pretty equally over the year. It was also exclusive of foreign ins., which paid no duty in the U.K.

Mr. Hyde Clarke pub. in the *Land and Building News*, this year, an art.: *Statistics of Fire Ins. in 1853 and 1854*. In the *Post Mag.* of 14th July, this year, there is a valuable letter by "Investigator," showing how, by reason of "short-term" fire pol., the sum insured was much greater than is indicated by the "duty returns" merely.

1856.—Mr. Thomas Miller, then of the Lond. office of the *Scottish Union*, and now of the *Royal*, read before the Institute of Act. a paper: *Some Suggestions respecting Fire Ins. Statistics* [*Assu. Mag.* vi. p. 333]. He opens as follows:

The efforts made by F. Ins. Cos. to collect accurate particulars of the state of their bus., and the profit and loss on different classes of risks, evince at once their appreciation of correct statistical information and the difficulty of obtaining it. Most offices of any standing keep regis. in which risks are divided into distinct classes, such as Cotton mills, Corn mills, Farm stock, Dwelling-houses, Carpenters' shops, etc., etc.; and in one set enter under their proper heads the sums insured, prems. received, and number of risks, so that they can tell from inspection how many corn or cotton mills, or other risks, they insure each year, the total sums insured on them, and the amounts of prems. received; while in another set they enter, under their proper heads, the number of corn or cotton mills, or other risks, in which loss has occurred, and the losses paid—so that by inspection they can see what losses have been sustained on each class. The difference between the prems. received and the losses paid, leaving expenses of man. out of view, constitutes a surplus or deficiency from which they judge of the profit or loss on each of their insurances.

One distinct objection exists to the common statistics—namely, that from the form in which they are made, their correctness cannot be entirely trusted: as the hazard of a class of risk is estimated not solely by the proportion of loss which occurs, but also by the amounts which happen to be insured on the properties on which loss is sustained.

He then furnishes some examples in support of this position, and points out that the difference which appears arises entirely from the accidental circumstance of the one office having in the particular cases insured double the amounts covered by the other. "It is evident, therefore, that full reliance cannot be placed on a merely debtor and creditor account of prems. and losses, and that the surplus or deficiency, although it may prove a profit or loss to have occurred, does not necessarily afford a sufficient guide for future transactions." The reason of this is, that the losses have been judged of by different measures. "Losses may happen where one office pays £5000 and another £500: the measure of loss to the former being 10 times as great as that to the latter; or the same office may lose £3000 on property which had until recently been insured only for £1000; so that the accident of an increased sum being insured before the fire happened makes a different measure to be applied to the extent of its ravages. He proceeds:

As the object of collecting fire ins. statistics is not merely to know how events have turned out during the past, in order that the profit or loss may be apportioned to each class of risk, but to ascertain how far past experience may be used to guide future practice, some method seems necessary by which the same event shall have a uniform expression, and not one depending upon accidental circumstances, which do not generally show its real bearings. Reverting to the example already given, it appears that to obtain uniform expressions for the same events, it is requisite that a known quantity be constituted a measure of them all: so that each risk must be considered insured for the very same amount. . . . In reducing to this measure the process is simple. The sum insured will always be considered £100, so that the prem. will just be the rate per cent. . . .

Assuming for the present that a proper classification of risks exists, the plan may be considered by which data may most readily be collected. The books in general use for this purpose are two—namely, a Register of Ins., and a Regis. of Losses. To these may be added a third, showing an Abstract of prem. and losses contrasted with each other.

By his proposed method 3 further books would be required. 1. "Regis. of Equated Ins." 2. "Regis. of Equated Losses." 3. "Abstract of Equated Ins. and Losses." The author gives examples of the work of deducing the data for these from the ordin. Registers, and proceeds:

It should be understood that the data of an ins. co. in this country must differ considerably from actual statistics of fires—that is to say, the total amounts insured do not bear the same proportion to the losses sustained which the total value of the property in the country bears to the actual damage which occurs from fire; and if we descend to particulars, the same may be stated in reference to each individual class of risk. Were it possible to procure a statement showing the value of each risk in the country, to classify the different risks under separate heads, and also to ascertain how many fires occurred, and the extent of damage in each case, and to equate the data in the manner pointed out, the results would agree with those experienced by ins. cos. if their pol. were all issued subject to the conditions of average in their integrity, and no expenses were incurred in the settlement of claims.

The FIRE INS. CENSUS of the U.S. will go some way towards meeting the requirements here stated; but does not entirely meet them. He gives examples of the operation of average pol.; and then proceeds to consider the causes which induce the insured to under-insure their risks, as follows:

If it could be ascertained what proportions the sums insured on different classes of risks bear to the values of property comprised in each of these classes, this law would be discovered. It is evidently one connected with the will: dependent partly upon the individual appreciation of the risk run from being under-insured, and partly upon the ability to pay the prem. required for ins., or to sustain a loss should one happen. Circumstances may combine to bring into action all or only some of these considerations; but if the proportion could be traced for each individual case, the law would prob. be found to follow some regular course. A fire in one's neighbourhood may suggest the idea of taking out an ins., or increasing the old one: new fire engines, low profits, trade bad, few men employed, and therefore less risk, although the stock of goods is great, may induce a reduction of ins. In seasons when trade is dull, losses are heavy, especially on certain classes of risks; and an interpretation has been given to this fact not very flattering to the morality or honesty of those in distress. May it not however happen, that at such times one cause of it is, that people retrench even in the sums they insure, while, as suggested, their stocks are larger than usual; so that when losses do occur, they are more likely to fall heavily upon the ins. cos. than at other times. . . . But as it happens that the values of property insured cannot be ascertained, there is no direct means of solving this question, although the truth of the position may be confirmed or disproved by ascertaining the intensity of loss. . . . Some of the larger offices have prob. abundant data for determining the question; and as *practical remedies are suggested by the knowledge of actual facts, the trouble of making the investigation might not be thrown away.*

The second law, or the value of the property in relation to the loss, he considers to be "entirely a physical one. It depends altogether upon the amount of loss compared with the value of the property, and that again rests upon physical causes," thus:

If fire be discovered at the outset, it may be extinguished with little trouble; but it may be long before it be discovered; or, when it is, water may be scarce, the engines out of order, the seat of the fire difficult to reach, or the materials which feed the flames highly combustible. Some of these, or other causes, prob. enter into combination in all fires of any magnitude; and although it would be impossible to classify the extreme variety of circumstances in which fires occur, or to learn the value of all property insured, yet, by observing how fires originate and from what causes they spread, and by arranging the insurances into corresponding divisions with subdiv. into classes, according to the peculiarities of risks, *some of the principal physical laws of fires might be so well defined that their values could be fixed, if not with mathematical exactness, at least with something approaching to it;* and while such information would guide the offices to some extent in the selection of ins., it would afford the surveyors of risks the means of knowing to what circumstances their inquiries should be directed.

Returning to his own special plan, he says:

The data collected under the equated system will supply the means of fixing the average prem. which should be charged for assurances in any class of risk, but they will not show to what extent the hazard of one property of the same class differs from that of another. Suppose, for example, that a house consists of one floor, occupied by one family, then there will be a certain risk of fire occurring and spreading; if another floor were added, and inhabited by a second family, the risk of fire would evidently be doubled; and could a thousand of such houses, each occupied by one family, be placed side by side and over each other, so as to form a cube, with free communications between the whole, the risk of fire would be nearly a thousand-fold as great as that of a single house of one floor. It is said that theatres on an average last 40 years before being destroyed by fire. If it were possible to form 40 of such risks, all intercommunicating into a vast cubic structure, then within a year, or a little more, a fire would occur amongst them, which, in the ordinary course of events, would destroy the individual theatre in which it originated; but as, on the supposition now made, that theatre would form part of an enormous erection, if it were impossible to extinguish the fire when confined to the single building, there would be no chance whatever of arresting its progress or preventing the others being entirely destroyed. The equivalent prem. for the ins. would thus be nearly 100 p.c. p.a.

From this conclusion the inference is obvious, that when all the elements of hazard advance in the same ratio and extent, the relative risk of different buildings of the same kind must be measured by their size; but the extent of risk or size does not depend altogether upon their capacity, for often a lofty floor contains less hazard than one much lower. In general, it would be more correct to say that extent of risk depends more upon the superficies of the floors than upon cubic measure; for this reason, that the number of workmen and processes generally increase in proportion to the superficial, not the cubic measure.

Of this he gives some examples, and continues:

To apply the principle now enunciated to practice, some add. to the equated statistics is necessary, especially in regard to mills, wholesale warehouses, and other extensive risks. It would not be very difficult to get returns of the superficies or extent of such risks, and the number of hands usually employed in them; and from these the average size of each, and the average number of hands to the 100 superficial yards, could be found. The average-sized building, with the average number of hands to the 100 superficial yards, should then form the standard for which the average rate should be charged; while those in excess or below that standard should be charged a comparatively higher or lower rate.

It is so far advantageous to be able to determine a point such as this; but in risks of the same class there are many other gradations of hazard, the values of which can only be discovered by a careful analysis of the physical laws of fires. In cotton mills, for instance, the processes differ; so do the modes of heating and lighting. There are differences in the quality of cotton spun and in the proportion of hands employed; and while, for these, differences of rate must be made, such differences, until data are collected, can only be of an ordinary character.

Mr. Miller contends that the "equated losses" furnish the means of solving the important practical question, *what sum is the maximum which should be insured on any class of risk?* He shows how this may be accomplished, and then proceeds to consider and "ascertain in what manner that total sum should be divided;" the object being to enable the office to obtain such a current prem. as will prob. meet its current losses. "It is evident (he says) that as business increases a larger maximum may be assumed, and that the amount of such maximum depends upon the profit arising from the ins. of such classes of risks." He says hereon:

In few classes of ins. will the experience of one year determine the amount of risk incurred; but this may be ascertained with sufficient exactness, in most instances, by grouping the results for several consecutive years. Thus, by taking those for the 5 years commencing respectively with the 1st, 2nd, 3rd, etc., years, and contrasting the prems. and losses, a continuous series of facts may be tabulated. This system has the advantage of showing how many years are required to produce average results; for if those collected in 5 years are found insufficient, the period may be extended to 7, 8 or 10 years. The average prem. required to yield stated profits may thus be more clearly determined than by any other plan.

The form in which the equated statistics are collected supposes the existence of each ins. for a year exactly. When the time is longer or shorter, any difficulty may be obviated by making the sum ins. and the prem. vary according to the time. Thus, if one ins. of £100 be for a year and a quarter, at the ann. prem. of £1, and another for 9 months at the same ann. prem., then the prem. and the sum insured will in the former case be put down as £1 5s. and £125, and in the later as 15s. and £75 respectively. Losses, however, should always be stated as proportioned to £100 insured. When there are more than 1 pol. in force at the same time on the same risk, care should be taken that only one of them be entered in the regis. of equated ins., and only one loss appear among the equated losses. It may be questioned whether the entries in the regis. should distinguish between buildings and contents; but any slight advantage to be gained by such practice would prob. be counterbalanced by the labour consequent upon it. Besides, there are unsettled points in the practice of ins., such as different rules being adopted in apportioning claims under non-concurrent pol., so that absolute correctness is not to be expected in any data which may be procured. *Equated statistics, however, reduce errors to their minimum.*

We have given prominence to this paper, because it was one of the first which attempted to grapple with the subject of fire statistics from a scientific basis. Some of the suggestions here made will yet germinate, if indeed they have not done so, in the labours of the National Board of N.Y.

A Parl. paper was issued this year which attracted a good deal of attention. It was a *Rep. on Fire Ins. Duties*, prepared under authority of the Chancellor of the Exchequer by Mr. George Coode. But as the discovery of an important error therein led to the issue of a revised ed. in 1863, we defer our notice of it until that date. [See notice of Mr. S. Brown's paper under date 1857.]

Mr. Braidwood, in his paper on "Fires," read before the So. of Arts this year, said, that fires in Lond. had doubled since the commencement of the Lond. Fire Brigade in 1833; "and not only are the 'calls' doubled, but the fires at which it is necessary to put engines to work have increased in a much greater ratio, being nearly 3 times the number they were 23 years ago." He added:

Many reasons have been given for the increase in the number as well as in the serious damage caused by fires of late years. It appears to me that the many improved modes of heating, and the general use of gas, render spontaneous ignition much more common than formerly, and when premises do take fire, cause the fire to proceed much more rapidly. In 1833, of the number of premises which took fire, barely 21 p.c. (20'9) used gas; while in 1855 gas was used in upwards of 67 p.c. of the buildings which took fire.

A number of fire ins. offices had been founded a few years previously. From the accounts required to be regis. under the Joint-Stock Cos. Act—7 & 8 Vict. c. 110—the following details were obtained. Several of the cos. did not survive the "preliminary stage."

Period of Accounts	Name of Co.	RECEIPTS.	EXPENDITURE.				Proportion of Expenditure to Receipts.
		Prems. Int., etc., less Re-Assn., etc.	Losses.	Expense of Management & Commission.	Dividends.	Total.	
Years.		£	£	£	£	£	
3	Royal	371,957	221,767	74,253	55,203	351,223	94'42
3	Manchester	148,615	76,701	32,982	30,500	140,183	94'32
4½	Equitable	114,075	80,253	48,487	4,340	133,080	116'66
3	Lancashire	98,135	65,333	37,289	6,840	109,462	111'54
3	Unity	59,521	35,244	69,073	10,789	115,106	193'39
3	Brit. Emp. Mut.	15,567	10,152	11,518	.....	21,670	139'20
1½	National Provincial	7,705	6,011	9,031	621	15,663	203'28
2	Lincolnshire	4,774	557	2,610	250	3,417	71'57
1	Times	4,575	5,227	8,827	575	14,629	319'76
		824,924	501,245	294,070	109,118	904,433	

From the above it appears that the total losses and expenses had averaged on the net prem. receipts, etc., 96'41 p.c.; including dividends, 109'64 p.c.

1857.—This year Mr. Samuel Brown read before the Statistical So. of Lond. a paper: *On the Progress of Fire Ins. in Gt. Brit., as compared with other Countries*, which paper is printed in the *Journ. of Statistical So.* vol. xx. p. 135. It was also separately printed in pamph. form. The author says:

Notwithstanding the importance of the subject, and the enormous amount of property which is known to be brought within the benefits of the system, no record exists of the actual amount insured, nor are there any public or private documents from which the real facts can be drawn. The nearest approximation to the truth is obtained from the returns of the Gov. duty, since it was first charged as a per-centage on the sums insured, commencing with 24th June, 1782. . . . And as ins. against fire effected by Brit. offices on property in foreign countries were exempted from the per-centage duty, from the 5th July, 1785, the most careful estimate we can make may still differ several millions from the actual amount of bus. transacted by the Brit. offices. Even when we have recourse to the best means in our power, and endeavour to analyze the returns of duty paid into the stamp offices, which have been called for by various members in different years, and printed by order of the House of Commons, we find the labour so great and the liability to error so increased, from the manner in which the statements have been presented, that scarcely any of the printed totals for any one year precisely agree. For Eng. the account of the sums paid into the Stamp Office for the fire ins. duties, are printed separately for each office, Lond. and country, with the allowance at 4 p.c. for collection in Lond., and 5 p.c. for collection in the country in each of the four quarters, all the items being given in shillings and pence. No attempt is made to bring together the total duty paid by each office in the year, nor by the Lond. or country offices collectively; and, without the great labour of copying the whole of the returns into a new form, it is very difficult to obtain accuracy in the totals. If any error has occurred in the printing, it is equally impossible to ascertain in which column the error lies. The same remark applies to the returns for Ireland, both for the ins. duties and the farming stock exempt, and, with the exception of the small portion of the returns from Scot., the whole document is by no means creditable to the Department from which it is issued.

Mr. Brown then proceeds to notice Mr. Coode's Rep. on the Fire Ins. Duties, pub. 1856; and he pointed out an error therein which materially affected the deductions to be drawn from it. In consequence the document was recalled, and a new ed. pub. in 1863, under which date we shall speak of it in detail.

Other difficulties than those already noticed exist in the endeavour to discover the true extent of fire ins., even as carried on in the U.K. Thus Mr. Brown further remarks:

It is to be regretted that no accurate computation can be given of the amount of ins. effected on foreign property. Only a few of the offices carry on this class of bus. Mr. F. G. Smith is disposed to estimate the total home and foreign bus. for last year at not less than 1500 millions; but I have been favoured with the opinion of a gentleman, whose position and experience gives the greatest weight to his judgment, that the whole of the foreign fire ins. of Gt. Brit., including that of the colonies, does not exceed £25,000,000. Between statements differing so widely it is impossible to give any accurate computation; but the greater part of those whom I consulted considered that from 100 to 200 millions were more prob. the limits, and I have, therefore, assumed 125 millions, being only one-fourth of the highest estimate.

Finally, he estimates the total sum insured by the fire offices in the U.K. at the end of 1856 to be the sums shown in the following T. And he then proceeds to estimate, from the best available authorities, the amount of fire ins. in force in several European countries and in the U.S., and arrives at the following general result, as at the close of 1856: [See Table on page 130.]

He says, "From this rough approximation it appears, that the total of the amount of Fire Ins. in the countries, or in the offices referred to in the preceding pages, and estimated to the present date, amounts to the large sum of 4482½ millions stg., though it is evident that it by no means gives an adequate view of the total amount of property insured against fire in Europe and America. A vast amount, protected by governments or private asso., must still have escaped notice. The ann. prem. on the whole amount may be not far short of £8,200,000, and the losses p.a. about £4,773,000.

This is the first general estimate of the amount of Fire Ins. existing in the western nations which had been made. The details will be found by reference to the several countries under their alphabetical heads.

Mr. Brown, in the same paper, considered that the value of houses and buildings in E. and W. might be taken at the figures to be stated below; and that the contents of houses, instead of being put at one-third of the value of the buildings, as assumed by Sir F. M. Eden, might be taken at half as much again as the value of the buildings, which would give the value of these two items as follows:

Value of Buildings	£634,000,000
Contents of ditto	981,000,000
Estimated Value for 1855	1,635,000,000
Insured in 1855	802,574,000

So that something less than one-half of the real value was insured.

During this year Mr. Charles Geo. Fothergill, then of the *Westminster Fire*, and now Gen. Man. of the *London and Lancashire Fire*, read before the Inst. of Act. a paper: *On the Causes of Fires in Lond. during the 24 Years from 1833 to 1856 inclusive; with some Remarks on the Deduction of Correct Rates of Prem. for Fire Ins.* [Assu. Mag. vol. vii. p. 91]. It is to the latter part of this paper that we now propose to draw atten-

[The following is the Table referred to in line 48, page 129.]

	Sums Insured against Fire Estimated at the end of 1856.		Premis. estimated as nearly as possible from previous Averages.	Losses Estimated.
Great Britain (deduced from the Duty)	£	£	£	£
Farming Stock exempt.....	927,000,000			
Foreign and Colonial Bus. about	70,000,000			
	125,000,000			
France , Proprietary Cos.	1,320,000,000	1,122,000,000	1,953,000	976,500
Mutual Cos.	480,000,000			
		1,800,000,000	1,566,000	774,000
Germany , including Austria (assuming the rate of in- crease for the last 3 years to be the same as in 1853)	700,000,000		1,624,000	812,000
Government Ins. & Foreign Ins. Cos., etc., about.....	450,000,000		1,125,000	1,125,000
		1,150,000,000		
Belgium , 10 Cos. (assume increase 2 p.c. p.a. since 1850)		138,000,000	144,900	63,500
Sweden , 4 Cos. (at same rate of increase as 1845 to 1850, prems. at double the losses)		11,800,000	53,100	26,500
Denmark , Gov. Ins. (assume increase at 2 p.c. p.a. since 1844, prems. being a tax equal to losses)	29,000,000		54,300	54,300
Company at Copenhagen.....	3,800,000		16,700	4,400
Another Co. (prem. and losses doubtful, assumed at about $\frac{1}{2}$ the preceding)	6,900,000		15,000	4,100
		39,700,000		
Russia , Co. at St. Petersburg (sum ins. not given, but, in 1852, the accounts state the Police tax due as £21,648, which, if for a year, would give about £29,000,000 ins. in 1852, say)		30,000,000	140,000	52,000
Poland , Gov. Ins. of Buildings (prem. taxes equal to losses)		16,000,000	86,000	86,000
America , Boston Offices (as- suming same rate of increase as in 1851)	23,000,000		69,000	34,500
New York Offices (bus. fell off in 1855, assumed same as in 1854)	152,000,000		1,370,000	760,000
		175,000,000		
Total		4,482,500,000	8,217,000	4,772,800

tion, for the reason more especially that the fires of Lond. will be dealt with fully under date 1865. The author says :

The chief purpose in preparing the present paper was to ascertain as far as possible the intensity of each cause of fire in each particular trade—more with the view of rendering the returns in some slight degree useful to fire offices, surveyors and inspectors of risks, than to attempt to deduce the appropriate rate of prem.; though a few remarks are also made on the latter point further on.

Many of his obs. upon the facts disclosed by the T. of Lond. Fires are alike sagacious and practical. Let the following suffice as examples :

Of such risks as are considered least hazardous by the ins. offices, and which are [were] rated accordingly, it is noticeable that churches and chapels show the largest, and a very considerable percentage of total destructions, viz. 8·8—a higher proportion than among carpenters, japanners, lamp-black makers, musical instrument makers, varnish makers, and many other extremely dangerous businesses. One among other reasons for this prob. is, that places of worship being ordinarily left unoccupied and unwatched, when not in use, the fire has opportunity to develope itself and obtain a

firm hold of the premises before attracting attention by showing itself. It is worthy of remark, too, that 60 p.c. of the total damages in this class of property are occasioned by flues, furnaces, and stoves.

Among the trades which have furnished us instances of total destruction, it is remarkable to find the following:—33 colour-makers, 17 illicit distillers, 129 lucifer-match makers, and others accounted of considerable hazard; 6 fires among printer's-ink makers were all either total or considerable; and 34 fires in *theatres* show no medium between either entire destruction or merely slight damage.

Of the trades enumerated in the T. as giving a large proportion of suspicious and wilful fires, he found the following unusually prominent:

127	Farming-stock fires	...	...	Suspicious	10.2	Wilful	14.4
7	Mast and blockmakers	...	...	"	14.3	"	14.3
7	Paper mills	...	...	"	—	"	28.6
101	Unoccupied	...	...	"	6.9	"	7.9
70	Warehouses (not Manchester)	...	...	"	—	"	8.6
29	Wharfingers	...	...	"	6.9	"	10.4

And as the damages arising from spontaneous combustion are, in the T., in all cases included among the causes connected with trade (both on account of the combustion usually arising from the peculiar nature of the materials kept in stock, and also as giving opportunity for fuller description of the precise materials originating the fire), we have an opportunity of observing an apparent connexion between the liability to spontaneous combustion and an excessive proportion of suspicious and wilful fires, which prob. deserves serious attention.

These points may be kept in mind with advantage when we reach the more extended T. in 1865.

He then proceeds to review Mr. Samuel Brown's method of endeavouring to deduce the rates for fire risks direct from the experience in regard to fires, which we have already noticed under FIRE INS. PREMS., date 1850, and further in the present art., and says thereon:

Now if the returns gave for *each trade* the total number of fires, with their causes, happening respectively in the bus, and in the private part of the tradesman's premises (or rather distinguishing between those traced to dwelling and trade origins respectively—for a cause connected with bus. might very prob. develop itself occasionally in the dwelling part of the premises, and *vice versa*), a T. similar to the one contained in this paper would offer a mode of deducing the rate, which, although sharing in some of the above objections, would escape the difficulty just mentioned as peculiarly attendant on Mr. Brown's method.

He gives an example in regard to *Bakers*, but says:

Yet it must be borne in mind that the above process would give us the correct rate for the *average bakers' list* only; and (as will be observed subsequently) we must vary the charge according to many other conditions, particularly as to whether the premises are brick built, or brick and timber built. We should therefore have to diverge from the above rate in the opposite directions of diminution and increase in order to include all the varieties of risk, the average rate for all bakers being 2s. 7d.

With respect to the suggestion here made for deducing rates of prem. by comparing the casualties in one risk with those in another (without the necessity of ascertaining the total numbers of each risk extant), it is evident that, as in the present returns any fire occurring in a baker's house is entered among the fires in private houses, the speculation is entirely vague, as far as the returns in our possession are concerned. I have put the idea forward as a speculation merely, and one possible to be acted on, provided the data are so shaped in their collection as to facilitate it. For this purpose the modification required in the present system of registering the returns would be slight, and although I have no doubt that the existing plan was devised deliberately and for sufficient reasons, yet I am equally sure that if any particular method of deducing rates from the returns of fires promised an available reliable issue, it would be the desire of all parties concerned to promote and adopt such a mode of regis. as would most facilitate the desired result.

But the real difficulty he sees in the way is that of *classifying the immense variety of fire risks for the purpose of deducing rates of prem.* It "stands in the way of every systematic method of calculating fire prems., whether on analogous principles to the mode of computing life prems. or otherwise." A few remarks therefore seem necessary on this part of the subject:

Now in classifying *lives* for assu. into different ages, a year apart, we have just as many simple risks as the number of years in the duration of life, and all healthy persons of the same age are charged at the same rate for an ordinary assu. These normal lives alone supply almost the entire bus. of the assu. offices, and the prems. charged thereon do not differ materially among all the offices. The analogous class of fire ins. would be for normal risks (a private house, a baker's shop, a carpenter's workshop with one bench only, etc., and all brick built and in the safest situation), and the appropriate rates for these ins. are as well ascertained and settled as those for the ordinary life assu. just mentioned. Inquiries at 20 or 30 different fire offices, as to their charges for these risks, would obtain the same quotation to a penny.

But in drawing up a list of the varieties of fire risks for the purpose of classification, with a view to apportioning correct charges for ins., we cannot confine our attention to what may be called the normal risks as above; but we have as many different risks as the sum of *all* the combinations of *all* the different possibilities of *construction, situation, occupation, etc.* In fact we enter on a far wider field than is presented by all the varieties of *diseased* and *foreign residence* lives. To include under the one head of carpenters (for instance) all such as practise that trade in all its gradations, will be to group together risks of more diverse hazards than those of an oilman and a butcher: for just as the risk of a life of 40 years of age resident in Eng. is different from that of the same life resident in Cayenne, so there is a wide diversity (requiring a variation of rate) between the hazard of an ins. for a carpenter using 1 bench, and for another with 10 benches, and for another adding the use of a drying stove, etc. To find by statistical obs., therefore, the correct average rate for a carpenter will not suffice, since he who uses one bench should not and *will not* pay beyond his own risk to make up for the hazard of his fellow using 10.

The remaining para. of Mr. Fothergill's reflective paper we have already quoted under FIRE INS. PREMS. 1857.

1858.—The Royal Fire Ins. Commissioners for *Saxony*, where a system of State Ins. prevails, pub. its Rep. for the 10 years 1849–58. Many of the details, which are of great

interest, will be given under SAXONY. Investigation showed that in the years 1857-8 only half of the movable property contained in the houses consumed by fire was insured; and in the country less than one-half.

A summary of the devastation by fire in *Russia* this year (1858) gave the following results: 46 churches, 333 public buildings, and 10,500 private houses burned. Total damage 26,440,279 roubles, or about £3,000,000 stg. [FIRES, GREAT.] [RUSSIA.]

1859.—In connexion with the statistics of fires it has often been considered whether any *Law of Conflagration* obtains, similar for instance to the Law of Mort., or perhaps rather to those cycles of disaster which appear to recur in regard to railway and other accidents, disasters at sea, etc. If there be any such law, it is certainly of the highest importance that it should be discovered: for in the discovery might also exist the means of avoidance. We do not propose to consider this question in detail here; but we may put on record the opinion of the late Ins. Commissioners of Massachusetts (Messrs. Elizur Wright and Geo. W. Sargent), who arrived at the conclusion [in their 4th Ann. Rep. embracing the Returns of this year] that there is "a good reason why the risk on an insured life, or on a thousand lives, should be viewed differently from that on an insured house, or on a thousand houses." Their reasoning of the question being as follows:

There is a basis for valuation in one case which does not exist in that of the other. Though by studying the statistics of conflagration we may somewhat enlighten our judgment as to the ratio of loss that may be expected to accrue on a given large number of fire risks, so as to be able to fix a reasonable prem. for insuring against fire, yet no carefulness or persistence of obs. has been able to discover any traces of a law in regard to the occurrence of destructive fires. They are preventable on the one hand up to the limit of non-occurrence; they are possible on the other up to the entire destruction of whatever is combustible: and they range pretty freely and fortuitously between these limits. The prob. in regard to them are always changing with time, place, and circumstances. Therefore it is that, leaving dishonesty out of consideration in both cases, fire ins. can never possess the certainty and stability which belongs to life ins.

1860.—By 23 & 24 Vict. c. 111 (Stamp Act), *Workmen's Tools* up to a value not exceeding £20 were exempted from duty. There was to be a separate pol., or distinct sum named, in any other pol.

The prosp. of the *British Fire Prevention and Ins. Co.*, "for affording to the public increased protection against fire, in connexion with fire ins.," pub. 1862, gave the following "classification of the causes of fire for 28 years ending 1860":

1. In which discovery follows immediately upon cause, and suppression is easy, with means at hand:

Candles	24'032	Drunkenness	'955	Per cent.
Lamps	771	Palpable carelessness	2'104	
Fire sparks	4'551	Incautious fumigation	'379	
Linen airing, etc.	4'448	Ignited shavings	3'465	
Apparel ignited on person	'640	Fire used in manufacturing		
Reading, etc., in bed	'198	purposes	4'060	
Children playing with fire	1'920			47'523

2. In which discovery may not follow immediately upon cause, but in which suppression on discovery is equally easy with means at hand:

Cinders put away hot	1'032	Lime slaking	'626	
Fires made on hearths and		Furnaces, boilers, etc.	1'672	
other improper places	'825	Ovens	'843	
Tobacco smoking, ashes		Stoves, defective, overheated, etc.	5'349	
dropped	2'988	Flues foul, defective, etc.	10'153	
Lucifer matches	2'050	Hearths defective, etc.	'338	
Spontaneous combustion	2'100			27'976

3. In which discovery follows immediately upon cause, but in which means of suppression would not prob. be so readily applied, although if applied would be as effective as in preceding cases:

Gas	8'229	
Gunpowder	'135	
Fireworks	'354	
		8'918

4. In which no estimate can be made:

Wilful	2'415	
Suspicious	1'447	
Accidents unavoidable	3'398	
Unknown	8'323	
		15'583

100

The mode in which this co. proposed to furnish "increased protection against fire" was by supplying its pol.-holders with Phillips' Patent Fire Annihilator; and the preceding T. is designed to show the large per-centage of cases in which its services would be of value if immediately at hand. The facts purport to be deduced from the Table of

London Fires. The Co. did not become a success. But the introduction of Fire Annihilators into every place of business, and indeed into every household, would be a national blessing.

A statistical return pub. under authority gave the number of fires in *Paris* from 1840 down to 1860, as also their nature. In these 20 years there were 5472 conflagrations, and in add. 23,056 cases of chimneys and flues catching fire. The total damage amounted to 16,457,344 *l.*, or £660,000 only, being £33,500 p.a. in round numbers. The losses were formerly much larger; but the excellent regulations as to building, and the improved fire department, have brought about the simple result here stated. [PARIS.]

1861.—In our art. FIRE INS., HIST. OF, will be found (last para.) a statement of the number of fire pol. in force in the U.K. at this date.

1862.—A Select Parl. Committee was appointed "to inquire into the state of legislation, and of any existing arrangements for the protection of Life and Property against Fires in the Metropolis." From the Rep. of this Committee we have quoted a number of interesting statistics under FIRE PROTECTION; but there was some other statistical evidence taken, which falls to be noticed here:

Mr. W. M. Browne, Sec. of *Westminster Fire*, and Hon. Sec. of Lond. Fire Engine Estab., estimated the amount of property in London insured by the various offices as being £266,000,000; and the amount of prem. paid for such ins. at from £340,000 to £350,000. The contribution towards the maintenance of the then Brigade amounted to about 2*d.* on each £100 insured in Lond. (Q. 285-6.) There was prob. some £15,000,000 in add. insured by offices which did not contribute to the Brigade expenses. (461.)

Mr. John Drummond, one of the Managers of the *Sun Fire*, considered the sum ins. against fire in the metropolitan district to be from £280,000,000 to £290,000,000. (1660.)

Mr. Wm. Newmarch, then Sec. of *Globe Ins. Co.*, considered that there was insured in the metropolitan area, *i.e.* 6 miles round Charing Cross, "about £300,000,000 stg. out of about £900,000,000 at risk." Under the system then in force he considered that those who insured the lesser sum actually paid for the protection of the larger sum—a very great injustice. (4043-48.)

Investigation showed that for the 168 years from 1694, when stamp duty was first imposed upon pol. of ins., down to this date (1862), the rate of increase in the sums insured by the Brit. offices had been 6 millions stg. p.a.; while during the 47 years from 1815, when the duty was increased to 3*s.* per £100 insured, the ann. increase had averaged 13½ millions. The bus. had increased in spite of the restrictions imposed upon it. The increase was due to the growth of commerce. The figures showed that no less than 46 millions more was insured this year than in 1861.

The Ins. Commissioners of the State of *Massachusetts* (Messrs. Elizur Wright and Geo. W. Sargent), in their Rep. pub. this year, say:

Fire and marine ins. cos., like those for ins. on life, are founded on the mathematical doctrine of chance, or what is sometimes called the law of average. By this law, however incalculable any particular event may be, the aggregate of the whole number of such events, when they occur in large numbers and no new general cause interferes to control them, will be very nearly the same in equal times. If you own a ship or a house, nothing will be more uncertain in itself than whether one will be wrecked and the other burned in the next year. But of all the ships and houses owned in *Massachusetts*, nothing can well be more certain than that the loss by water and fire next year will not exceed 10 p.c. of their value; or that the loss by fire on all the property exposed to damage from that element will not exceed 2 p.c. of its value. It is nearly equally certain however that the damage from fire to stores, stables, carpenters' shops, mills and manufacturing estab. generally, will bear a much greater ratio to the whole value of such property, than the damage to inhabited dwellings will bear to their whole value. It may be 1½, 2, 3, or 4 times as great, for each of several classes into which such property may be divided. The prosperity of all fire ins. cos. depends very much on a knowledge of what is the average value of the risk of each species or class of property; and this can only be approximated by the widest and most careful statistical inquiry. No such inquiry has ever been instituted in any country to our knowledge. In this country it is certain that it has not been. Our countrymen must have gone into the business with no better light than the experience of cos. in other countries, and a sort of dim instinct teaching them that a carpenter's shop or a livery stable exposed to ignited cigar stumps, and other incendiary missiles, must be several times more hazardous than a well-kept dwelling-house.

Working at first by mere presumption, instead of the results of statistical inquiry, some cos. amassed enormous profits, while others left themselves beacon-wrecks to warn succeeding cos. against the low rates that ruined them—supposing they were not ruined by high expenses. This high-priced experience of former ins. is of course of some value, just as it is, but of very little value compared with what it would have been, if every co. had carefully classified its risks, and ascertained exactly what was the ratio of loss for the year to the amount insured through the year for each class. If the same classification could have been adopted by all the cos., by combining the result of the experience of all, or of such a number that in each class one should have an amount insured through a year ten thousand times greater than the single risk in that class, we should have an average value of the risk in each class which would be a sure starting-point for judgment as to the proper rate to be charged for any particular risk. A few of the larger cos. we believe do make a classification of risks with a view to their own future guidance by the results. But they are not likely to impart to the public the knowledge they may thus gain, without some equivalent to themselves. The smaller cos. seldom make any such classification, or keep their records in such a way that the fate of their various classes of hazards can be ascertained, and the results would perhaps only misguide them if they did. Having insured a dozen planing-mills at 10 p.c. for a year and lost nothing, one might decide to take them in future at 5 p.c.; or having insured one and lost the whole amount, it might decide never to write at all on another, at any rate.

They then give an example, drawn from the experience of one of the *Massachusetts* mutual F. ins. cos., with about 7 or 8 million dols. then at risk, which classified and watched the losses on its pol. for 6 years ending 1846—the result being as follows :

Classes of Risks.	Amount Insured.	Amount of Losses.	Loss p. 100 dols.
	dol.	dol.	dol.
1. Dwelling-houses and contents, barns, [stables] and contents	6,785,672	23,038	·057
2. Stores, merchandize, shops and contents (wood, and blacksmiths' shops excluded)	662,362	17,782	·447
3. Taverns and contents, [livery] stables and contents	164,524	18,498	1·874
4. Cabinet, carpenters' and wood shops and contents	118,996	12,893	1·806
5. Blacksmith and machine shops and contents	69,304	1,218	·293
6. Grist-mills, saw-mills, spice-mills and contents	24,218	5,994	4·125
Aggregate of all classes	7,825,076	79,423	·169

"Here," say the Commissioners, "the more hazardous classes are manifestly too small to give any trustworthy indication of the average value of such risks; and it can by no means be safely inferred from the 1st and 2nd classes that stores are 7 times as hazardous as dwelling-houses. Yet on these statistics, showing that the 6th class had suffered 72 times as much loss in proportion to the amount insured as the first, the directors refused to insure the more hazardous risks from that time. The loss of the same co. without such hazards has been for the last 3 years respectively, '086, '188, '233 p. 100 dol., or on the average more than it was when it bore them. *The truth is that any co. large enough to furnish real ins. on any risk could take the more hazardous risks as safely as the less hazardous, if it could only ascertain their true average value, by which to regulate its prem.* : but this can only be done by combining the experience of many companies for a series of years."

In view of endeavouring to secure this last-named object, the same Commissioners issued during the year 1861 a circular to the fire ins. cos. doing bus. in the State (Massachusetts), inviting them to furnish their experience, ranged under 3 heads, to the Commissioners. The classes proposed were: (1) Inhabited Dwellings—minimum hazard; (2) "Shaving Risks," i.e. all estab. that produce wooden shavings, from carpenters' shops to steam-planing mills—maximum hazard; (3) other risks. Replies were received from a large number of cos. expressing willingness to comply in the future: but as to the past, they could not under the labour implied in the task. Twelve of the smaller mutuals did, however, contribute returns; but as these mostly excluded Shaving Risks, the results were embraced under 2 classes, as follows:

	Pol.	Amount Insured One Year.	Loss p.a.	Number of Losses.	
				Total.	Partial.
Inhabited Dwellings	6155	dol. 6,059,664	dol. 9,800	10	47
Other risks	7409	17,505,957	50,413	69	19

From this, it appears that the loss on inhabited dwellings was ·162 p. 100 dol., and on the other risks ·288 p. 100 dol.

In the *Ins. Monitor* of New York this year there was an able art. headed "Epidemic Fires," from which we draw the following passages:

No one engaged for any considerable time in the practical bus. of fire ins., or acquainted with its hist. for the past 30 or 40 years, can have failed to notice the recurrence, at intervals more or less distant, of sweeping fires, which in extent and rapidity of succession seem almost of an epidemic character. Years of comparative exemption from great disasters are succeeded by one of those fearful periods which are to the underwriter what the year of panic and financial revulsion is to the man of bus. A succession of rich and plentiful years are often followed by a year of want and hunger, and long periods of health are sometimes the prelude to the scourge of the unrelenting epidemic. The extensive fires recently occurring in Troy and Quebec have sternly impressed upon us the fact that epidemic periods have not passed away for ever, but are as likely to recur at similar intervals in the future as they have in the past, and suggest the inquiry *whether there may not be some law governing and controlling not only these disastrous occurrences, but also the great average of losses in the ordinary conduct of the bus.*

Experience has demonstrated that this epidemic disposition is not confined to particular classes at particular times, but that it often assumes more gigantic proportions, and seizes upon whole towns

one after another, as shown by three or four periods through which a portion of our older underwriters have passed.

No combined effort has ever yet been made by American underwriters to discover the general laws governing the recurrence of fires, or even the degree of profit arising from particular classes of risks for a series of years. . . . Ordinary or ever-yday fires may be regarded as having causes, always or generally operating; and to these causes experience has endeavoured to fix some proper rate—in most cases too low; but no calculation has been made for those periods so painfully remembered by some of our fraternity. . . . It is the opinion of some of our most experienced underwriters that by observing the cause of events extensively and accurately, such knowledge may be obtained as will furnish a rule of ins. at least approximately accurate and sufficient for practical use. A law of accident and design may thus be obtained answering the same purpose in fire ins. as the T. of mort. in that of life—a sort of eventuality T.—a T. of injury or disaster by fire, in the case of houses, merchandize, particular trades, and different condition of subjects insured.

It was in view of this subject of fire epidemics that we commenced the formation of our T. of *Gt. Fires* [*FIRES, GT.*] already given, and on which we shall have some remarks to offer in a later part of this art.

A Chart prepared by the Eds. of the *Wall Street Underwriter*, showing the operations of the 96 fire ins. offices of the State of *New York* for this year, furnished the following details:

Premiums received during 1862	£1,546,496
Losses incurred in 1862	£949,209
Expenses, except taxes	432,411
Taxes on cap. of £4,086,572, say 1·75 p.c.	67,513
	<hr/> 1,449,133
Showing a profit of	£97,363

—being 6 p.c. of the prem. received, or 2½ p.c. on the cap. employed.

1863.—The *Revised Rep. on Fire Ins. Duties*, by Mr. George Coode, was “presented to both Houses of Parl. by command of H.M.” The Rep., as already stated, had been first issued under date 29 Nov. 1856; but in consequence of the discovery of a material error, that issue was withdrawn, and this issued in its stead. This circumstance gave the opportunity for general revision and reconsideration, and hence the tables, etc., here given may be regarded as unusually complete. The greater part of the document is devoted to the subject of the Duty on F. Ins., which we have discussed under its proper head. [*FIRE INS., (PER-CENTAGE) DUTY ON.*] But there are many facts in the document which have an important bearing upon the general question of Fire Ins., more especially from a statistical point of view.

Mr. Coode admits that “a great part of the past experience of the progress of [Fire] Ins. in England, and of the effects of various fiscal changes made from time to time, which would prob. have been of great use in the consideration of this subject, remain wholly unrecorded.” He therefore, in common with all other writers upon the subject, had to resort to estimates based upon such facts as we have, instead of the exact facts complete, which ought to have been recorded. Some of his T. have already been given under *FARMING STOCK INS.*; *FIRE INS., (PER-CENTAGE) DUTY ON*; and *FIRE INS. POL., STAMP DUTY ON*.

He advocates the reduction of the 1s. stamp duty on pol., in favour of ins. for small amounts; and furnished the 2 following T. in support of this position. He also in this connexion quoted the experience of several *Friendly Sos.* [*F. Sos., 1828, and 1842.*]

A Statement showing the total number of *New Pol.* issued in England, and amount of Duty paid thereon, during the Quarter ended Lady-day, 1862, by the several Offices under mentioned.

Office.	New Policies.	Duty.
Sun	6225	£8082
Royal Farmers	457	344
Atlas	1472	2022
County	2664	2633
Law Union	475	364
Alliance	1076	2582
Imperial	2565	4685
Law	1154	1630
Liverpool and London	3809	5360
Manchester	1751	2295
Norwich Union	2907	2846
Royal	5395	6572
Union	1143	1322
West of England	2248	2669
Phoenix	4749	6163
Total	38090	49569

Fire Insurance Duty.—A Statement of the Number of New Pol. under £100 issued in England, Lady-day Quarter, 1862, for the respective amounts in the several offices as under mentioned :

Office.	£1 to £5 inclusive.	Above £5 to £10 inclusive.	Above £10 to £20 inclusive.	Above £20 to £50 inclusive.	Above £50 to £100. inclusive.	Total.
Sun.....	107	782	889
Royal Farmers.....	16	66	82
Atlas.....	2	12	101	115
County.....	1	61	280	342
Law Union.....	7	54	61
Alliance.....	3	39	122	164
Imperial.....	1	51	195	247
Law.....	2	51	53
Liverpool and London	12	52	308	372
Manchester.....	20	140	160
Norwich Union.....	108	394	502
Royal.....	61	445	506
Union.....	10	126	136
West of England.....	8	228	236
Phoenix.....	60	372	432
Total.....	19	614	3664	4297

The number of fire policies in force in 1861 in the various fire offices in Gt. Britain was 1,389,304; and Mr. Coode estimated that if fire pol. were freely obtainable under £250, the number would be doubled; and if freely obtainable under £100, trebled; and that the amount of property insured in the first case would be increased by *one-eighteenth*, and in the second case by *one-third*. Undoubtedly (he adds), the greatest number of persons, indeed nearly all, whose destructible property is not worth £300, are uninsured. "The value of the aggregate of their destructible property very probably approaches that of all the more wealthy classes."

Mr. Coode pointed out, that as to all trades whatever, wholesale or retail, the ins. for a year *spreads over and protects all the stock in hand during that year*. Thus, £100 insured would cover above £15,000 of a butcher's or a poulterer's stock in a year; £30,000 of a fishmonger's stock, £1200 of any trader changing his stock 12 times a year. He illustrates the point more in detail. The greatest retail trades of the country, the provision trades, are carried on with stocks at all times extremely small in comparison with the amount of the ann. aggregate of transactions. Bakers rarely have a stock in hand for a week's consumption; butchers from two to three days' consumption; fishmongers more than one day's; poulterers two days'; greengrocers three days'; grocers three weeks'; coal merchants one week's consumption. It is greatly to under-estimate the frequency of the change of stock of these great trades to put it at only 50 times a year.

In the wholesale trades, the average stock in hand corresponds with the rate at which the producers or importers can bring the commodities to the market. Of imported provisions there is ordinarily not more than a few days' consumption on hand—except of groceries, which may occasionally reach an average of three months. Of cotton, it is very rarely that stock equal to three months' consumption is on hand. Our home agricultural production is that of which the largest stock is commonly on hand. The farmer's or grazier's live stock may at any time equal a year's sale, the grazier's even two or three; but these are to a very small extent subject to loss by fire or the subject of fire ins. at all. A farmer's dead stock of corn, hay, and other crops, immediately after a harvest, constitutes the stock of that produce of a whole year, and he must, to be safe, insure on the largest stock that may be destructible by fire.

He speaks out very boldly regarding the frauds practised upon the fire offices, thus:

All experienced officers of such sos. declare that their necessary prems. might be reduced one-half, but for the fraudulent demands they are compelled to comply with. One-half of their losses are unavoidable or innocently caused; the other half are payments to fraudulent or criminal persons, who make the loss a certainty to the other contributors, for their own gain. The sos. are thus the paid agents for carrying into effect a transaction, the whole practical result of which is the certain loss of half the cost of ins. to honest purchasers of pol., and the transformation of that loss into the certain gain of dishonest pol.-holders. *The transaction is in about equal degrees an assu. of indemnity for innocent loss, and a reward for fraud or crime.*

It is well to say that peace of mind, the sense of security of mere property, can scarcely be purchased at too high a price; but it is still to be proved whether he who purchases a pol. purchases so much peace of mind as he loses by encouraging the creation of the very peril he fears, while it is certain that the great bulk of poorer persons whom the ins. sos. deliberately shut out from part. in the supposed benefit of ins. are, by the system itself, exposed to more than a doubled danger (for fraudulent fires are most entirely destructive), by its operation in encouraging the most insidious and alarming of crimes. If the universal interest in the protection of the property and the lives of the

25 millions of people uninsured, as well as the property of the 5 millions insured (including the families of pol.-holders), is to be considered in this discussion, the result would prob. be that it requires the immediate suppression of the system of fire ins. by substituted risk now practised by the fire ins. cos.—a system which cannot pretend to save or make in any degree more safe any property or any life, and has no other ascertainable operation on either but to reward very handsomely and encourage indefinitely the destruction of both. Every year, a few hundreds of pounds are expended by the public authorities in rewards for the discovery of criminals, with the view to their punishment; every year the ins. offices pay hundreds of thousands—in 1862 they paid by their own uncontested estimate to the very perpetrators of the offences above £1,000,600 in Gr. Brit. and Ireland—for the reward of successful fraud and arson.

He then enters upon a variety of estimates in support of his arguments, or in opposition to his opponents—the advocates of the repeal of the duty. We shall not follow him into the details; but the broad results may be briefly stated, and possess an interest, even now that the “duty” is a thing of the past.

The *insurable* property (against fire) in E. and W. had been estimated as follows:

Houses and buildings.....	£750,000,000
Household furniture, etc.....	253,000,000
Stock-in-trade, etc.	130,000,000
Total	£1,141,000,000

To which might be added, if it could be estimated, (1) value of machinery not included; (2) value of ships and craft not covered by marine ins. The above figures gave to every man, woman, and child (of the then pop.) an average of insurable property amounting to £57 10s. per head.

The *uninsurable* property in E. and W. had been estimated as follows:

Land and its modifications in England	£1,815,000,000
In colonies and abroad belonging to English residents, say	100,000,000
Funds and other investments	1,500,000,000
Live stock, capital sunk in tillage and manurance, minerals unfashioned, etc., say	150,000,000
Shipping covered by marine ins. [and therefore not requiring other ins. protection]	60,000,000
Total	3,625,000,000

Mr. Coode added some other items by which he brought up the amount to £3,825,000,000, or £191 10s. per head for every man, woman, and child of the then pop.

The property *actually insured* in 1862 he found amounted to £1,007,034,014, leaving £133,965,986 uninsured—plus the value of the items not included in the values of insurable property. Estimating these for the purpose of completing this survey, he considered that some 460 millions remained uninsured, which might be insured. But a good deal of this uninsured property consisted of furniture and stock-in-trade in such small quantities individually as to be practically excluded from ins. by the then regulations of the fire ins. offices—many of which would not issue a pol. carrying a less prem. than 3s.

In E. and W. then, property was permanently insured to the extent of 1007 millions. Of this, about 600 millions of house property and furniture was insured for about two-thirds of its value, and represented therefore 900 millions worth of property. About 400 millions of ins. on stock-in-trade and commerce represent transitory stocks changing generally from four to twelve times in a year, and amounting probably to more than 2000 millions in the year. The 1007 millions of *actual* ins. probably therefore represented more than 3000 millions of *effectual* ins. This was put forward to meet the argument that the fire ins. duty was a tax of 200 p.c. upon ins.

Regarding the various estimates as to the proportions of insured and uninsured property made by other persons, Mr. Coode remarks:

Two eminent persons estimate the proportions in money, and one of them says there still exists in London 80 p.c. in value of property uninsured, and remaining to be brought within the benefits of insurance. The other of these, of yet greater authority, estimates the value of property in the metro. actually insured at £300,000,000, and of the uninsured at £600,000,000, or the uninsured as 2 to 1 of the insured. This estimate is adopted in the petitions presented to Parl. for the repeal of the duty. A more common estimate adopted by experienced officers of ins. cos. is that one-half of the property in the whole country is *uninsured*. But equally eminent and experienced persons, advocates also of the reduction of the duty, wholly discredit even this last estimate, and have assured me that their experience does not justify an estimate of one-third of all the property in the country as being uninsured.

On this point Mr. Coode further remarks with some force, that “when instead of values, which the fire returns do not and cannot estimate, we give our attention only to the number of properties damaged or destroyed, which is all that the fire returns show, it will be found that by far the greater number of the uninsured and uninsurable property consists of the smallest tenements, to a great extent mostly wooden out-houses of the slightest construction, in the worst neighbourhoods, and of the very lowest value of any class of buildings.”

He next proceeds to consider the effect of the fiscal changes in the per-centage duty on the progress of fire ins.; and as the result, furnishes the facts given in the following T.

Periods.	Per-centage Duty.	Average Ann. Value of Property Ins.	Progress in Periods.	Rate of Annual Increase.
88 years, 1694 to 1782	none		200 (?) millions increase.	2 ² / ₉ (?) mills
14 years, 1782-3 to 1797 ..	at 1s. 6d.	156 millions	12 ¹ / ₂ millions increase.	9 ¹ / ₁₀ "
8 years, 1797 to 1804	" 2s. 0d.	207 "	51 millions increase.	6 ⁴ / ₁₀ "
11 years, 1806 to 1815	" 2s. 6d.	316 "	109 "	10 "
6 years, 1816 to 1821	" 3s. 0d.	388 "	72 "	12 "
5 years, 1822 to 1826	" "	415 "	27 "	5 ² / ₃ "
5 years, 1827 to 1831	" "	467 "	52 "	10 ² / ₃ "
5 years, 1832 to 1836	" "	514 "	47 "	9 ² / ₃ "
5 years, 1837 to 1841	" "	596 "	82 "	16 ² / ₃ "
5 years, 1842 to 1846	" "	673 "	77 "	15 ² / ₃ "
5 years, 1847 to 1851	" "	724 "	51 "	10 ¹ / ₃ "
5 years, 1852 to 1856	" "	816 "	92 "	18 ² / ₃ "
5 years, 1857 to 1861	" "	941 "	125 "	25 "
1 year, 1862	" "	1007 "	46 "	46 "

The following is a quinquennial abstract of Mr. Coode's T. of sums insured in E. and W., as calculated from the duty returns; but including in 1835 and downwards the amount insured on farming stock, although exempted from duty:

Aggregate Property Insured in E. and W.

1785	£133,777,330	1815	£389,232,000	1845	£681,888,872
1790	144,748,000	1820	396,841,300	1850	738,106,239
1795	177,563,300	1825	427,700,000	1855	844,252,857
1800	211,392,300	1830	482,215,300	1860	956,876,279
1805	248,200,000	1835	521,183,303	1868	1,504,164,000
1810	324,829,000	1840	625,106,328		

These figures do not include *Scotland or Ireland*. The duty collected in these countries respectively (from certain dates) is shown in the T. of Duty we have given at the close of art. FIRE INS., (PER-CENTAGE) DUTY ON.

The separate amounts insured on farming stock from 1835 downwards is shown in our T. given under FARMING STOCK INS.

The wonderful development of the bus. is seen in the above figures. We have added the figures for 1868, the last entire year of the collection of duty, for the purpose of completing the view. The duty had been partially repealed in 1864.

Returns collected for the city of *Baltimore* in 1863 disclosed the following facts: The value of the property destroyed by fire was 130,832 dols. The amount paid by the ins. cos. in settlement of losses was 45,672 dols. The loss falling on the insured, and those insufficiently insured, was therefore 85,160 dols., or £37,000!

1864.—By the 27 & 28 Vict. (sec. 9 and 10), the duty on all ins. on stock-in-trade was reduced to 1s. 6d. p. £100 as from 25 June. The effect of this change is visible in returns of sums insured.

In the *Companion to the Almanack* for 1864 there is an interesting art.: *Fire Ins. and its Taxation*, wherein the writer reviews the statistics of fires compiled by Mr. Samuel Brown in 1850, and noticed herein under that date. The writer says: "And if we investigate the numbers for the 14 years subsequent to the period embraced by Mr. Brown's tabulation, we shall find that most of the above ratios are pretty well maintained year after year; although of course the total number of fires, owing to the constant add. to the number of houses, is every year increasing in the metropolis." The writer proceeds:

This may be simply a curious matter to the reader; but it is all-important to any plan for insuring property from fire. We do not know whose house will be burned down, or injured by fire, to-morrow, next week, next month; we do not even know that *any* house will be burned; but it is found nevertheless, that there is a sort of law of uniformity in human carelessness as in more important matters; this carelessness produces just about the same ratio of mischief on an average of years, in any one community; and this ratio enables ins. cos. to grant ins. upon property, which would be quite impracticable if they could not make even a conjecture as to the prob. amount of destruction by future fires. So reliable are such tabulations as these (for approximate estimates) that the statistical authorities above named could make a tolerably good guess at the number of ladies who will set fire to bed-curtains next year, by reading novels in bed when they ought to be asleep; and to the number of conflagrations attributed to "the cat"—the scapegoat for many household peccadilloes. If it be found that out of (say) 400,000 houses (the number now in the metropolis), a tolerably uniform number are burned or injured by fire every year; and if the value of the destroyed property also keeps pretty close to a mean average—then we have the means of judging how much money would suffice to pay the losses, and how much a householder might fairly be charged for a contract to liberate him for his losses in case his property is burned. It is in this way that the curious uniformities above noticed have rendered fire ins. practicable.

Mr. W. Hoe pub. [in 1866] a tabular statement: *Fire Statistics of the Trades of Lond.* (1864), the purpose of which was to show, when read in connexion with the rep. on the Fires of Lond., the liability of each trade to conflagration. Hence the 1st col. gave the number of persons or firms in each trade; the 2nd the total number of fires in the year from known, or (col. 3) unknown causes; 4th total fires; 5th rate p.c. of fires to each trade. The idea is very good, but it is clear that, to be of any value, it must be extended over a series of years.

The following figures are from the Report of the Fire Marshal of *Philadelphia* for this year. The fires in that city from 1 Jan. to 31 Dec. were 394, of which 346 were accidental, 40 incendiary, and 3 of unknown origin. Four of the incendiary fires were caused by lunatics; and more than one-half of them were made by thoughtless, mischievous, and reckless juveniles. The greatest number of fires among the accidental causes were "sparks on shingle roofs, 43." The aggregate losses and ins. were as follows:—Estimated loss, £199,849; ins. £109,255; loss over ins. £90,594.

Nearly half of the total loss of the year was in July. The following passages relate to the U.S. generally, and are important:

In *America*, the occurrence of fires last year was of remarkable frequency, and many of the conflagrations were unusually disastrous. The losses were enormous, and entirely unprecedented. From statistics collected from the most reliable records, the total loss by burning in the U.S. is estimated at no less than 50,000,000 dol. In the Northern States alone during the month of July, which was memorable by ravages of fire everywhere, property was consumed to the amount of upwards of 5,000,000 dol., much of which comprised the most important Gov. works, together with valuable manufacturing and bus. estab.

These deplorable calamities are clearly attributable to two causes. 1. *The demoralized condition of society growing out of the sad war that afflicts the land*, engendered a spirit of diabolical incendiarism, which, in a number of localities, accomplished an immense amount of mischief. 2. *A severe and long protracted summer drought*. For 60 days between the latter part of May and the latter part of July, there fell only 2½ inches of rain, while the rays of the sun were intensely hot, and there was a constant prevalence of westerly winds. Everything combustible, by this extreme aridity of the atmosphere, reached so high a degree of inflammability that the slightest spark sufficed to kindle a fire that was sure to spread with the rapidity of lightning and the fury of a whirlwind.

This is but another testimony to the terrible influence of summer heat in producing fires; as also to the consequences in a like direction of political disquietude.

1865.—By 28 & 29 Vict. c. 30, the per-centage duty on all fire ins. as from 25 June was reduced to 1s. 6d. p. £100. The stamp duty upon all pol. was also reduced from 1s. to 1d. The effect upon the returns is seen in the great increase in the aggregate of sums insured, in the figures of the last line of the last T. we have given under date 1863.

The Hon. Wm. Barnes, in his Rep. upon the transactions of the ins. cos. trading in the State of N.Y. this year (pub. 1866), introduces us at once to the main features of the year as to fire bus., thus:

The hist. of 1865 is soon recorded; it has been a year of sad and persistent disaster to both our fire and marine ins. cos., unrelieved by any features of consolation, except those which always accompany affliction. . . . Low rates of prem., high commissions to brokers and agents, large expenses, and heavy losses, have, even with small or no dividends, made the gross expenditure exceed the gross income, and rendered the cos. less strong in assets as compared with liabilities than at the end of the preceding year 1864. . . .

The following facts abstracted from the elaborate T. in the Rep. will show the precise situation. The paid-up cap. of the several fire offices trading in the State exceeded 44 millions of dol. The amount of fire ins. at risk during the year reached 2,560,227,508 dol., or upwards of 512 million stg. The actual losses on transactions of the year may be best shown in the following manner:

309 New York Joint-Stock Fire Cos.		36 Fire Offices in other States.	
34 Excess of Inc. over Expen.	£ 251,040	19 Excess of Inc. over Expen.	£ 179,023
75 Excess of Expen. over Inc.	406,801	17 Excess of Expen. over Inc.	82,465
Balance against	£ 155,761	Balance in favour	£ 96,558

16 New York Mut. Fire Cos. Gross Expen. . . £ 21,974 Gross Inc. . . £ 26,456 Bal. in favour . . £ 4482
Bal. of losses on the 3 classes of cos. £56,721. The causes of these losses were two. 1. Low premiums. 2. High commissions and large expenses. The total improvement of capitals of 35 Joint-Stock Fire Cos. of the State, as manifested during the year, was £196,372!

London Fire Engine Estab. Records.—With the close of 1865 the Lond. Fire Engine Estab., which commenced its operations on the 1st Jan. 1833, passed out of its independent form of existence, its functions being assumed by the Metropolitan Board of Works, under the circumstances stated in our art. FIRE BRIGADES. The records of the Estab. for the 33 years of its existence—kept by Mr. Braidwood, its Chief, down to 1861, and by his successor, Capt. Shaw, down to end of the period—afford much information of interest. The statistical details were compiled by Capt. Shaw soon after the close of the present year, and were pub. in 1870. From these we draw the following:

The total number of calls received during the 33 years was 35,145. Of these 2769 were false alarms; 3307 proved to be only chimney alarms; and 29,069 were for fires, of which 9635 resulted in serious damage, and 19,434 in slight damage.

FIRES, STATISTICS OF.

The following are the details for each year of the period, compiled from Capt. Shaw's T. No. 107.

YEAR.	Total No. of Calls.	ALARMS			FIRES.		
		False.	Chimney.	Total.	Total No. of Fires.	Seriously Damaged.	Slightly Damaged.
1833	592	59	75	134	458	166	292
1834	651	57	112	169	482	144	338
1835	643	66	106	172	471	156	315
1836	756	66	126	192	564	167	397
1837	717	82	134	216	501	144	357
1838	755	79	108	187	568	185	383
1839	755	70	101	171	584	182	402
1840	863	84	98	182	681	230	451
1841	855	67	92	159	696	258	438
1842	912	61	82	143	769	248	521
1843	911	79	83	162	749	260	489
1844	926	70	94	164	762	260	502
1845	875	81	87	168	707	276	431
1846	1022	119	69	188	834	258	576
1847	990	88	66	154	836	300	536
1848	1011	120	86	206	805	296	509
1849	1003	76	89	165	838	256	582
1850	1038	91	79	170	868	247	621
1851	1159	115	116	231	928	276	652
1852	1105	93	89	182	923	263	660
1853	1062	72	90	162	900	261	639
1854	1123	79	91	170	953	339	614
1855	1154	91	81	172	982	370	612
1856	1104	75	72	147	957	393	564
1857	1302	96	91	187	1115	471	644
1858	1320	94	112	206	1114	417	697
1859	1282	91	102	193	1089	421	668
1860	1241	69	116	185	1056	422	634
1861	1409	89	137	226	1183	385	798
1862	1543	109	131	240	1303	321	982
1863	1624	81	139	220	1404	349	1055
1864	1715	101	127	228	1487	402	1085
1865	1727	99	126	225	1502	512	990
TOTAL	35145	2769	3307	6076	29069	9635	19434

[For a continuation of this T. see end of this art.]

The following is a *Monthly Summary for the 33 Years 1833-65 of all Fires, False Alarms, and Chimney Alarms.* [Compiled from Capt. Shaw's T. No. 106.]

MONTH.	ALARMS.			FIRES.			TOTAL CALLS.
	False.	Chimney.	Total.	Seriously damaged.	Slightly damaged.	Total.	
January	194	339	533	857	1694	2551	3084
February	199	325	524	748	1570	2318	2842
March	208	374	582	836	1604	2440	3022
April	207	334	541	752	1483	2235	2776
May	189	242	431	716	1651	2367	2798
June	234	245	479	748	1581	2329	2808
July	301	188	489	770	1719	2489	2978
August	277	187	464	847	1708	2555	3019
September.....	244	195	439	810	1523	2333	2772
October.....	252	250	502	738	1487	2225	2727
November.....	242	267	509	883	1580	2463	2972
December.....	222	361	583	930	1834	2764	3347
TOTAL.....	2769	3307	6076	9635	19434	29069	35145

We next have a *Weekly Summary of all Fires, False Alarms, and Chimney Alarms, from 1833 to 1865* [being Capt. Shaw's T. No. 72].

WEEK	False Alarms.	Chimney Alarms.	Fires.	Total Calls.	WEEK.	False Alarms.	Chimney Alarms.	Fires.	Total Calls.
1st, ending Jan. 7	40	77	563	680	Brought forward...	1245	1864	14323	17432
2nd, " " 14	38	69	584	691	27th, ending July 8	69	42	571	682
3rd, " " 21	42	78	583	703	28th, " " 15	61	49	593	703
4th, " " 28	57	77	576	710	29th, " " 22	70	40	553	663
5th, " Feb. 4	46	80	595	721	30th, " " 29	72	38	533	643
6th, " " 11	44	84	540	668	31st, " Aug. 5	55	36	610	701
7th, " " 18	54	78	575	707	32nd, " " 12	62	42	571	715
8th, " " 25	51	91	568	710	33rd, " " 19	75	53	587	715
9th, " Mar. 4	48	69	591	708	34th, " " 26	56	42	548	646
10th, " " 11	56	98	558	712	35th, " Sept. 2	65	37	544	660
11th, " " 18	54	87	557	698	36th, " " 9	65	44	551	663
12th, " " 25	42	93	559	694	37th, " " 16	53	61	549	660
13th, " April 1	33	68	525	626	38th, " " 23	62	42	546	650
14th, " " 8	40	74	481	595	39th, " " 30	51	35	541	627
15th, " " 15	44	70	517	629	40th, " Oct. 7	63	59	528	650
16th, " " 22	56	85	560	701	41st, " " 14	66	48	492	606
17th, " " 29	61	82	528	671	42nd, " " 21	52	62	480	594
18th, " May 6	47	57	501	599	43rd, " " 28	50	56	530	636
19th, " " 13	37	64	542	643	44th, " Nov. 4	48	63	523	634
20th, " " 20	45	69	521	635	45th, " " 11	63	63	632	758
21st, " " 27	43	44	543	630	46th, " " 18	49	57	591	697
22nd, " June 3	36	48	592	688	47th, " " 25	57	73	543	673
23rd, " " 10	46	48	525	629	48th, " Dec. 2	50	67	514	631
24th, " " 17	40	59	542	641	49th, " " 9	43	65	548	656
25th, " " 24	52	61	547	660	50th, " " 16	47	86	600	733
26th, " July 1	79	54	550	683	51st, " " 23	56	81	649	786
Carried forward...	1245	1864	14323	17432	52nd, 8 days endg. 31	64	102	819	985
					TOTAL	2769	3307	29069	35145

But in view of carrying the obs. still further we have a *Daily and Hourly Summary for the 33 Years 1833-65 inclusive, giving Fires only, and omitting False Alarms and Chimney Alarms.* [This is T. No. 38 of Capt. Shaw's summary.]

Hour.	Sunday.	Monday.	Tuesday.	Wednes.	Thurs.	Friday.	Saturday.	TOTAL.
A.M. 1	334	193	243	283	242	286	233	1814
" 2	291	188	237	221	225	213	190	1565
" 3	224	159	201	171	194	203	164	1316
" 4	213	120	151	152	174	140	137	1087
" 5	121	82	111	119	108	116	135	792
" 6	95	69	88	87	76	89	88	592
" 7	92	71	65	63	80	70	99	540
" 8	96	65	78	86	82	70	76	553
" 9	81	76	81	76	87	79	77	557
" 10	90	81	90	97	70	81	84	593
" 11	101	107	95	101	106	90	98	698
" 12	104	106	118	102	122	114	104	770
P.M. 1	108	109	145	135	124	113	105	839
" 2	100	115	124	113	139	104	115	810
" 3	102	115	123	111	116	81	121	769
" 4	102	132	144	127	112	99	129	845
" 5	128	148	149	138	145	126	145	979
" 6	162	187	188	197	188	156	147	1225
" 7	240	266	260	240	260	247	221	1734
" 8	296	317	277	289	292	279	294	2044
" 9	308	386	331	354	348	327	344	2398
" 10	294	382	370	384	363	400	356	2549
" 11	247	348	340	318	306	299	246	2204
" 12	221	279	243	262	261	231	299	1796
TOTAL	4150	4101	4252	4226	4220	4013	4107	29069

It will be seen from the first of the three foregoing Tables that while *July* is the month which produces the greatest number of "False Alarms," *December* is the month which has the greatest total of calls, as also of serious fires. *June*, which has been regarded as a most fatal month for London fires, only stands No. 8 in regard to total calls and No. 10 in regard to "seriously damaged." See FIRES, GREAT, 1873, June 9.

In the second of the above three Tables, the year is divided into 52 periods of 7 days

each, except the last week, which has 8 days. Making allowance for this additional day, the last week of the year is still the most fatal as regards fires, the preceding week next, then the 2nd week in Nov., and next to that the 1st week in Aug. It is not easy to follow the operation of the causes which produce this last-named result.

In the third Table we have *Tuesday* as the greatest day for fires, while "unlucky Friday" has the least. Regarding the hours, 10 o'clock P.M. is the worst; 7 o'clock A.M. the best.

The hours which have most fires are 8, 9, 10, and 11, P.M.—10 occupying the first place; 12 o'clock P.M. is heavy; while 1 o'clock A.M. is still more so. All the heavy figures run from 6 P.M. to 4 A.M. It has been said of fires as of births, that about two-thirds of them occur in the night.

In the following T. [which is a condensation of Capt. Shaw's No. 3], the fires are classified according to the *trades, etc., of the occupiers* at the time of the fire. The T. extends over the 33 years 1833-1865.

TRADES.	Seriously damaged.	Slightly damaged.	TOTAL.	TRADES.	Seriously damaged.	Slightly damaged.	TOTAL.
Ale and Porter Merchants . . .	1	...	1	Coffee House Keepers . . .	96	218	314
Almshouses . . .	1	...	1	Colour Makers . . .	23	27	50
Apothecaries & Dealers in Drugs, no Chemical Works carried on.	60	63	123	Comb Makers . . .	1	...	1
Arsenal . . .	1	...	1	Confectioners and Pastrycooks . . .	62	96	157
Artists' Colourmen . . .	...	1	1	Coopers . . .	49	55	104
Asphaltum Works . . .	3	4	7	Corn Chandlers . . .	97	37	134
Auctioneers . . .	1	1	2	Corn Merchants . . .	1	1	2
Bacon Dryers . . .	10	14	24	Cork Burners . . .	6	8	14
Bagnios . . .	28	90	118	Cork Cutters . . .	32	16	48
Bakers . . .	183	350	533	Cotton and Wool, Workers in . . .	6	4	10
Bakers, Biscuit . . .	10	8	18	Cotton Merchants . . .	4	1	5
Barge and Boat Builders . . .	15	23	38	Cotton Wick Manufacturers . . .	2	...	2
Barges . . .	5	5	10	Cotton Factories . . .	...	1	1
Basket Makers . . .	22	16	38	Cow Keepers . . .	...	8	8
Baths and Washhouses . . .	7	7	14	Crinoline Manufacturers . . .	1	1	2
Beer Shop Keepers . . .	116	178	294	Curriers and Leather Dressers . . .	36	32	68
Berlin Wool Warehouses . . .	...	2	2	Curiosities, Dealers in . . .	...	1	1
Bird dealers . . .	1	...	1	Dancing Academies . . .	1	...	1
Billiard Rooms . . .	1	3	4	Distillers . . .	34	25	59
Billiard Table Makers . . .	...	1	1	Distillers, Naphtha . . .	3	2	5
Blacking Makers . . .	3	7	10	Distillers, Turpentine . . .	6	2	8
Bleachers . . .	2	...	2	Distillers, Chemists . . .	3	...	3
Booksellers, Binders, & Stationers . . .	186	256	442	Distillers, Tar . . .	29	13	42
Bottle Merchants . . .	2	7	9	Docks . . .	11	19	30
Boot and Shoe Makers . . .	35	51	86	Drapers, Woollen, Linen, & Mercers . . .	360	420	780
Brace and Belt Makers . . .	...	2	2	Drysalts . . .	9	12	21
Brewers . . .	20	26	46	Druggists, Wholesale . . .	14	20	34
Brick Makers and Kilns . . .	3	5	8	Dyers . . .	16	35	51
Bridges . . .	1	...	1	Eating Houses . . .	37	141	178
Brokers, & Dealers in Old Clothes . . .	153	175	328	Egg Merchants . . .	...	2	2
Brush Makers & Bristle Merchants . . .	14	12	26	Elastic Web Manufacturers . . .	...	1	1
Builders . . .	146	104	250	Emery and Black Lead Manufac. . .	3	4	7
Butchers . . .	23	68	91	Engineers, Mechanical . . .	44	47	91
Butchers, Pork . . .	9	21	30	Engravers . . .	...	7	7
Button Makers . . .	...	1	1	Envelope Makers . . .	1	...	1
Cabinet Makers . . .	376	237	553	Fancy Box Makers . . .	15	11	26
Calenderers . . .	1	1	2	Farming Stock . . .	181	49	230
Camphor Makers . . .	1	2	3	Feather Merchants and Dressers . . .	19	17	36
Cane, Dealers in . . .	21	9	30	Fellmongers . . .	23	6	29
Cap Makers . . .	1	3	4	Felt Makers . . .	7	1	8
Cap Peak Makers . . .	...	1	1	Firewood Merchants . . .	6	9	15
Carpenters, and Workers in Wood, not Cabinet Makers . . .	537	607	1164	Fire Preventive Company . . .	1	...	1
Card and Paste-board Makers . . .	12	7	19	Firework Makers . . .	64	22	86
Carriers . . .	4	7	11	Fire Annihilator Manufacturers . . .	1	...	1
Carvers and Gilders . . .	4	4	8	Fishing Tackle Makers . . .	1	1	2
Cement Makers . . .	4	...	4	Fishmongers . . .	2	14	16
Cemeteries . . .	1	...	1	Fish Curers . . .	4	10	14
Chandlers . . .	184	246	430	Flax Dressers and Mills . . .	5	11	16
Charcoal and Coke, Dealers in . . .	15	27	42	Flour Mills, Steam . . .	12	5	17
Charcoal Manufacturers . . .	...	1	1	Flour Mills, Water . . .	1	1	2
Cheesemongers . . .	55	74	129	Flower, Artificial, Makers . . .	20	11	31
Chemists, including all places in which are Laboratories for Chemical Purposes . . .	55	69	124	Floor Cloth Manufacturers . . .	33	7	40
China and Glass, Dealers in . . .	3	18	21	Founders . . .	29	59	88
Chocolate and Chicory Manuf. . .	3	4	7	French Fancy Warehouses . . .	26	30	56
China and Glass Manufacturers . . .	3	3	6	French Polishers . . .	3	2	5
Churches . . .	32	66	98	Fried Fish Shops . . .	1	6	7
Clothiers . . .	6	10	16	Furriers, Skin Dyers, and Dressers . . .	37	30	67
Cloth Workers . . .	1	...	1	Furniture Stores . . .	2	...	2
Coal Merchants . . .	17	28	45	Galvanized Iron Manufacturers . . .	1	...	1
Coach Makers . . .	45	45	90	Gaming Houses . . .	2	4	6
Cochineal Dryers . . .	...	1	1	Gas Works . . .	22	47	69
Cocoa Nut Fibre Manufacturers . . .	11	5	16	Gas Fitters . . .	1	...	1
Coffee Roasters . . .	10	31	41	Ginger Beer & Soda Water Makers . . .	3	5	8
				Glass and Lead Merchants . . .	1	2	3
				Glass and Lamp Merchants . . .	3	4	7
				Glass Manufacturers . . .	10	15	25
				Glue and Size Makers . . .	6	7	13

TRADES.	Seriously damaged.	Slightly damaged.	TOTAL.	TRADES.	Seriously damaged.	Slightly damaged.	TOTAL.
Gold and Silver Smiths . . .	...	1	1	Painters, Plumbers, and Glaziers .	36	42	78
Granary Keepers . . .	11	8	19	Panoramas . . .	...	2	2
Greengrocers and Fruiterers .	19	49	68	Paper Stainers . . .	19	22	41
Grocers . . .	219	177	396	Paper Hangers . . .	2	1	3
Gum Manufacturers . . .	1	1	2	Paper Mills, Mkrs, & Warehouses	9	3	12
Gunpowder, Dealers in . . .	1	...	1	Paper Collar Makers . . .	1	...	1
Gun Makers . . .	1	1	2	Parchment Makers . . .	2	...	2
Gun Barrel Makers . . .	1	...	1	Paraffin Light Company . . .	1	...	1
Gutta Percha Works . . .	1	2	3	Pawnbrokers . . .	26	21	47
Glass and Emery Paper Makers	4	2	6	Perfumers . . .	5	4	9
Hay and Straw Salesmen . . .	12	4	16	Perambulator Makers . . .	4	3	7
Haberdashers . . .	17	23	40	Pewterers . . .	1	1	2
Hair Dressers . . .	5	12	17	Photographers . . .	12	12	24
Hair Pin Makers . . .	...	1	1	Photographers' Apparatus Manuf.	1	1	2
Harness Makers . . .	1	...	1	Pianoforte Makers . . .	13	6	19
Hardware, Dealers in . . .	3	9	12	Pitch Makers . . .	2	...	2
Hat Makers . . .	142	86	228	Picture Dealers . . .	3	2	5
Hearth Rug Manufacturers . . .	2	...	2	Pipe Makers . . .	4	7	11
Hemp and Flax Merchants . . .	2	...	2	Pickle Manufacturers . . .	1	2	3
Hemp Dressers . . .	12	3	15	Portmanteau Makers . . .	1	11	12
Herbalists . . .	1	1	2	Potteries . . .	10	11	21
Hop Merchants . . .	2	6	8	Poulterers . . .	3	...	3
Horse Slaughterers . . .	1	...	1	Printers . . .	84	139	223
Horsehair Merchants . . .	12	15	27	Printers, Copperplate and Litho.	17	23	40
Hospitals . . .	3	5	8	Printers, Calico . . .	1	2	3
Hotels, including Club Houses	39	155	194	Private . . .	1189	6132	7321
Hosiery . . .	5	7	12	Prisons . . .	4	11	16
Ice Merchants . . .	1	2	3	Provision Merchants . . .	16	50	66
India Rubber Manufacturers . .	16	9	25	Public Bldgs., not Warehouses .	5	...	5
Ink Makers . . .	5	8	13	Public Places of Entertainment,	11	47	58
Ink Makers (Printers') . . .	13	1	14	not Theatres . . .	1	1	2
International Exhibition . . .	...	17	17	Quill Merchants . . .	61	58	119
International Bazaar . . .	...	1	1	Rag Merchants . . .	25	59	84
Iron Bedstead Makers . . .	1	2	3	Railways . . .	...	...	...
Ironmongers . . .	1	1	2	Retail Shops and Counting	13	20	33
Italian Warehousemen . . .	1	2	3	Houses . . .	...	...	...
Japanners . . .	48	17	65	Revalenta Arabica Food Mer-	1	...	1
Jewellers & Watch & Clock Makers	9	8	17	chants . . .	...	...	...
Jute and Hemp Manufacturers . .	4	...	4	Ribbon Dressers . . .	...	...	...
Kamptulicon Works . . .	2	...	2	Rice Mills, Steam . . .	3	...	3
Lace Manufacturers . . .	...	1	1	Rope Makers . . .	50	25	75
Lamp Makers . . .	2	5	7	Rope Makers, Wire . . .	...	1	1
Lamp Black Makers . . .	17	14	31	Sack Makers . . .	14	17	31
Laundresses . . .	43	97	140	Saddle Tree Makers . . .	1	3	4
Lath Renderers . . .	1	...	1	Safe Makers . . .	1	...	1
Leather, Patent, Makers . . .	15	8	23	Saltpetre Refiners . . .	2	1	3
Leather Embossers . . .	...	1	1	Sale Shops and Offices . . .	397	799	1187
Leather Sellers and Dressers . . .	4	7	11	Sail Makers . . .	16	4	20
Leather Bag Makers . . .	2	...	2	Salt Merchants . . .	...	2	2
Lime Wharves and Merchants . .	4	3	7	Saw Mills, Steam . . .	80	57	137
Linen Manufacturers . . .	1	...	1	Scale Board Cutters . . .	8	...	8
Lodgings . . .	295	2532	2827	Scale Makers . . .	...	2	2
Looking Glass & Pic. Fr. Mkrs.	17	13	30	Schools . . .	25	38	63
Lucifer Match Makers . . .	94	74	168	Scum Boilers . . .	1	7	8
Lucifer Match Box Makers . . .	2	2	4	Sewing Machine Makers . . .	...	1	1
Lunatic Asylums . . .	3	5	8	Ships . . .	56	88	144
Maltsters . . .	11	10	21	Ships, Steam . . .	18	25	43
Manure Manufacturers . . .	2	5	7	Ship Builders . . .	25	33	58
Manure, Dealers in . . .	7	11	18	Ship Chandlers . . .	18	11	29
Markets . . .	1	1	2	Ship Breakers . . .	...	1	1
Marine Stores, Dealers in . . .	62	111	173	Shirt and Collar Makers . . .	1	3	4
Mast and Block Makers . . .	5	6	11	Shot Makers . . .	1	...	1
Masons . . .	2	2	4	Silk Dressers . . .	1	3	4
Mat Makers . . .	12	11	23	Silk Weavers . . .	23	14	37
Mattress Makers . . .	11	14	25	Smoked Meat, Dealers in . . .	...	1	1
Metal Perforators . . .	...	2	2	Snuff Mills . . .	1	...	1
Milliners and Dress Makers . . .	64	128	192	Soot Merchants . . .	3	48	51
Mineral Teeth Manufacturers . . .	...	1	1	Spice Merchants . . .	2	2	4
Mills . . .	1	1	2	Splint Cutters . . .	1	...	1
Mills, Steam . . .	5	3	8	Stationers, Wholesale . . .	3	2	5
Mills, Wind . . .	2	...	2	Stables . . .	235	312	547
Mill Makers . . .	1	...	1	Starch Makers . . .	10	2	12
Musical Instrument Makers . . .	48	26	74	Statuary, Dealers in . . .	1	...	1
Musical String Makers . . .	1	...	1	Stay Makers . . .	2	7	9
Mustard Makers . . .	2	2	4	Steam Mills . . .	1	...	1
Music Halls . . .	1	1	2	Steam Engines . . .	1	...	1
Naphtha Manufacturers . . .	3	1	4	Straw Hat and Bonnet Makers . .	26	26	52
Newsvendors . . .	2	4	6	Sugar Refiners . . .	19	17	36
Nets, Dealers in . . .	...	12	12	Surgical Bandage Makers . . .	...	2	2
Nurserymen . . .	4	2	6	Tailors . . .	145	199	344
Oakum Manufacturers . . .	2	2	4	Tallow Chandlers, Wax Chan-	77	75	152
Oil Works . . .	30	11	41	dlers, and Soap Boilers . . .	25	16	41
Oil and Colourmen . . .	187	235	422	Tanners . . .	14	10	24
Opticians . . .	2	1	3	Tarpaulin Makers . . .	1	1	2
Organ Builders . . .	1	5	6	Tea Merchants . . .	1	...	1
				Telegraph Company . . .	1	...	1

TRADES.	Seriously damaged	Slightly damaged	TOTAL.	TRADES.	Seriously damaged	Slightly damaged	TOTAL.
Theatres	7	43	50	Warehouses, Manchester	36	65	101
Timber Merchants	24	22	46	Waste Paper Dealers . . . . .	...	1	1
Tinmen, Braziers, and Smiths	95	209	304	Waterproof Canvas Makers	32	12	44
Tobacco Manufacturers	21	22	43	Watch Glass Makers	1	...	1
Tobaccoists	76	141	217	Waterworks	3	2	5
Tool Merchants . . . . .	...	1	1	Water Gilders	1	...	1
Toy Warehouses	17	28	45	Weavers, Carpet	4	5	9
Trimming, Dealers in	1	1	2	Wharfingers	21	41	62
Trimming Weavers	2	4	6	Wheelwrights	4	7	11
Tripe Dressers	1	1	2	Whiting Makers . . . . .	...	3	3
Tube Drawers	2	...	1	Whip Makers	1	...	1
Type Founders	2	2	4	Willow Bleachers	1	...	1
Umbrella Makers	10	3	13	Willow Blind Makers	2	2	4
Under Repair Building	126	186	312	Wine Coopers	1	...	1
Unoccupied	45	137	182	Wine and Spirit Merchants	42	140	182
Upholsterers	60	80	140	Wire Workers	13	6	19
Varnish Makers	26	24	50	Wool Staplers and Manufacturers	1	1	2
Victuallers	410	915	1325	Wool Warehouses	11	20	31
Vinegar Works	3	2	5	Workhouses	22	24	46
Vitriol Works . . . . .	...	1	1	Workshops, no hazardous goods or process	1	...	1
Wadding Makers	26	20	46	Zinc Works . . . . .	...	...	...
Wadding, Gun, Makers . . . . .	...	1	1				
Waggons on the Road	3	4	7				
Warehouses	43	64	107				
				TOTAL	96351	94342	290693

The following T. (which is an abstract of Capt. Shaw's No. 4) enumerates the causes of the 29,069 fires during the 33 years 1833-65 :

CAUSES.	TOTAL.	CAUSES.	TOTAL.
Accident	25	Burning Wood placed in Cellar	1
Alteration	1	Bursting of Kiln	1
Airing Beds	8	Camphine boiling over	2
Airing Linen	83	Camphine exploding	3
Airing Stable	1	Candle	3218
Ashes falling from Furnace	1	Canvas Ceiling	2
Asphalte boiling over	3	Carboy of Muriatic Acid bursting	3
Benzoin, Drawing off	1	Carboy of French Polish bursting	1
Bleaching Basket	1	Carelessness	106
Bleaching Ginger	2	Cask of Spirits falling	1
Bleaching Hops	1	Casting Blowing	2
Bleaching Nuts	10	Cats	34
Bleaching Pot	1	Chafing Pan	3
Bleaching Spice	1	Charcoal Fire	2
Bleaching Straw	1	Charcoal, Overheating	2
Blue Light, Making	1	Charcoal Pan	6
Boiler	7	Charcoal Stove	9
Boiler exploding	4	Charcoal Sweepings	1
Boiler Funnel	1	Chair falling into Fire	3
Boiler, Heat from	44	Chandelier falling	1
Boiler improperly set	1	Chemicals boiling over	1
Boiler leaking	1	Chemicals exploding	7
Bonfire	8	Chemical process	1
Bottle Ether being broken	3	Chicory put away on Fire	3
Bottle Electric Fluid bursting	1	Children playing with Fire	471
Bottle Essential Oil bursting	1	Children playing with Lucifers	95
Bottle Whisky bursting	3	Children playing with Fireworks	2
Bottle Nitrous Acid exploding	1	Child reaching over Fire	1
Boy drawing Beer in Cellar	1	Chimney Shaft, Heat from	8
Boy lighting a Fire	2	Chinese Fire	2
Boys playing with Fireworks	1	Cigar thrown down Area	7
Boys playing with Gas	1	Cleaning Dress with Camphine	1
Boys playing with Gunpowder	3	Cleaning Gas Cock	1
Boys smoking	1	Cleaning Pots	1
Brazier's Fire	1	Clothes coming in contact with Fire	4
Brazier's Stove	1	Clothes drying	3
Breaking Still Pipe	1	Clothes drying on Stove	3
Breaming Boat	4	Clothes Horse falling on Fire	3
Broken Windows	1	Clothes Horse upset by Monkey	1
Bude Light	1	Cooking	16
Burning a Basket	1	Cooking Apparatus	8
Burning Bedding	1	Cooking on Roof	1
Burning a Bed	1	Cooper's Devil	1
Burning a Cask	2	Copper	13
Burning Cork	4	Copper boiling over	7
Burning a Hole with Hot Iron	1	Copper Fire	43
Burning Pitch off a Cask	2	Copper Fire, Timber under	2
Burning out Cistern to Pitch it	2	Copper, Heat from	5
Burning out Paint Pots	1	Copper, Heating, without Water	2
Burning Rubbish	10	Copper, Portable	1
Burning Sawdust	1	Copper set on Floor	12
Burning Shavings	7	Coke Fire	7
Burning Soot Falling	1	Cork Ashes	1
Burning Straw	1	Cork put away on Fire	1
Burning Waste Paper	1	Cotton Waste	4
Burning White Fire	5	Covering Pipes with Millboards	1

FIRES, STATISTICS OF.

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CAUSES.	TOTAL.	CAUSES.	TOTAL.
Crinoline	3	Flue, Furnace, Heat from	12
Cutting away Party Wall	1	Flue, Furnace, Overheat of	4
Curtains	2822	Flue adjoining	101
Defect in Refining Pan	1	Flue adjoining blocked-up	8
Defect in Wall	1	Flue adjoining, Copper	1
Dipping Sleepers, Hot	1	Flue adjoining, Defect in	43
Doubtful	190	Flue adjoining, Furnace, Defect in	6
Dogs	9	Flue adjoining, Foul	2
Drawing off from Boiler	1	Flue adjoining, Heat from	12
Dress taking Fire	1	Flue adjoining, Furnace, Heat from	1
Drying Bags	3	Flue adjoining, Hot Plate	1
Drying Cellar	1	Flue, Hot Air, Overheat of	1
Drying Fibre	1	Flue, Forge, Overheat of	1
Drying Flax	1	Furnace	150
Drying Herbs	3	Furnace, Overheat of	18
Drying House	2	Furnace set on Timber	1
Drying Jute	1	Furnace Shaft	1
Drying Lace	2	Fumigation	81
Drying Millboards	2	Friction	39
Drying Paper	6	Fusees igniting	17
Drying Room	1	Fusees, Case of, Falling	3
Drying Salvage	1	Gas	1682
Drying Stove	199	Gas Burner	5
Drying Umbrellas	1	Gas Burner too near Ceiling	1
Drying Waste	1	Gas Cock, Defect in	1
Drying Wood	10	Gas Cooking Apparatus	1
Drying Room, Overheat of	4	Gas Company's Men at work	2
Drying Stove, Overheat of	5	Gas, Escape of	364
Dustbin under Shed	2	Gas, Explosion of,	44
Dustbin falling into Fire	1	Gas, from Street	5
Easing Stop-cock	1	Gas fitters at work	20
Eau de Cologne	1	Gas, Lighting	74
Emptying Powder on Fire	1	Gas Pipe, Defect in	4
Escape of Hydrogen Gas	1	Gas Stove	17
Essence Pot leaking	1	Gas Swing Bracket	5
Examining Rockets	1	Galley Fire	1
Experiment	7	Glue Boiling	14
Explosion	44	Gauge Glass bursting	1
Fat, Boiling of	3	Gunpowder	4
Fat Boiling over	3	Hand Grenade	1
Fat falling in Steam Consumer	1	Hatter's Stove	1
Fat thrown on Fire	1	Heat from Casting	1
Fat upset	2	Heat from Kiln	3
Falling of Rocket Stick	1	Heat from Malt	1
Fire adhering to Coffee Pot	2	Heat from Retorts	1
Fire at Rotherhithe	1	Heat from Sun	14
Fire Basket	1	Heating by Steam	1
Fire dropped in Letter Box	1	Heating Cement	1
Fire dropped through Flooring	1	Heating Coffee	1
Fire dropped through Hole	1	Heating Ether	1
Fire from Locomotive	1	Heating Gold Size	1
Fire from Street	1	Heating Solution	8
Fire from Grate adjoining	1	Heating Tan	1
Fire from Grate, Heat from	6	Hearth, Defect in	26
Fire from Grate improperly constructed	1	Hearth, Fire on	141
Fire, Heat from	12	Hearth improperly set	1
Fire in next House	1	Hearth laid on Timber	21
Fire in Workshop	3	High Tide	1
Fire in Vault	1	Hot Ashes	259
Fire left burning	1	Hot Air Pipes	10
Fire made on bricks	3	Hot Air Stove	1
Fire made in Saucepan	2	Hot Coals	2
Fire made on Floor	3	Hot Coke	21
Fire made on Sheet Iron	1	Hot Charcoal	9
Fire on Wharf	1	Hot Grease	1
Fire on Iron Kettle	1	Hot Metal	3
Fire-pan	1	Hot Oven	41
Fire-place, Blocked-up	7	Hot Plate	29
Fire-place built against Shed	1	Hot Rivets Falling	2
Fire-place, Defect in	10	Hot Water Stove	2
Fire-place set on Timber	2	Hot Water Pipes	7
Fireworks	58	Hot Gridiron among Sawdust	1
Fireworks, Explosion of	3	Horse Hair falling on Fire	1
Fire in Cask	5	Hurdle falling on Cockle	1
Fits	4	Hurdle falling on Wharf Fire	1
Flue	32	Illumination	4
Flue, Blocked-up	153	Incendiarism	133
Flue, Boiler	1	Insanity	5
Flue, Defect in	301	Intoxication	155
Flue, Descending	3	Ink boiling over	1
Flue, Heat from	13	Ironing	1
Flue, Hot Air	18	Ironing Stove	62
Flue, Hot Plate	2	Iron Foundry adjoining	1
Flue, Foul	1946	Iron Plate fixed on Timber	1
Flue, Overheat of	18	Iron Hanger put away hot	1
Flue, Kitchen	1	Japan boiling over	3
Flue, Copper	87	Kiln	22
Flue, Copper, Defect in	2	Kiln, Overheat of	6
Flue, Furnace	14	Kiln, Furnace, Overheat of	1
Flue, Furnace, Defect in	7	Kitchen Range	7

CAUSES.	TOTAL.	CAUSES.	TOTAL.
Lamp	51	Pipe for Ventilating Gas Light	1
Lamp, Camphine	2	Plumbers	10
Lamp, Naphtha	70	Plumbers, Fire adjoining	2
Lamp, Naphtha, upset	4	Poker falling out of Fire	2
Lamp, Paraffin	11	Phosphorus	7
Lamp, Paraffin, upset	8	Proofing, Boiling of	1
Lamp, Petroleum	1	Railways	1
Lamp Black, Overheating	8	Rats gnawing Matches	1
Lightning	12	Rats gnawing Gas Pipe	1
Lighting Fire	7	Reading in Bed	34
Lighting Lamp	1	Removing	1
Lighting Oven	2	Repairs	12
Lighted Paper	25	Repairing Gas Meter	1
Lighted Shavings	1	Repairing Gas Pipe	3
Lighted Sawdust	1	Repairing Organ	1
Light in Vault at Funeral	1	Retorts bursting	2
Light thrown in Yard	1	Retorts leaking	1
Light thrown into Ventilating Ovening	7	Refusing to admit Firemen	1
Light thrown down Area	63	Roasting Coffee	2
Light thrown under Door Step	1	Roasting Chestnuts	1
Light thrown from Omnibus	1	Roasting Machine	1
Lime slacking	93	Roasting Nut Gall	2
Lime slacking by Rain	14	Rosin, Boiling of	6
Lime slacking by High Tide	2	Rubbish too near Furnace	1
Lime unslacked	2	Sack falling on Fire	1
Linseed Oil leaking	1	Sack placed near Fire	1
Lucifers	306	Sewing in Bed	3
Lucifers, Friction of	1	Seeking for Leaking Gas Pipe with	
Lucifers, Case of, Dropping	1	Candle	1
Lucifers, Jackdaw playing with	1	Shavings near Oven	1
Making Polish	4	Shavings taking Fire	5
Making Pomatum	1	Sheet Iron under Stove	1
Making Varnish	2	Shooting Birds	2
Mattress placed before Fire to dry	1	Singeing a Horse	1
Meat falling into Fire	1	Smoking in Bed	2
Melting Beeswax	3	Smoking Fish	1
Melting Gum	1	Smoking Hams	3
Melting Lead	12	Smoking Rats	1
Melting Pot	2	Smoking Sausages	2
Melting Pan bursting	1	Smoking Tobacco	406
Melting Sulphur	1	Smoke Hole	11
Melting Sealing Wax	1	Smothering Iron	1
Melting Varnish	1	Soldering Pot	1
Metal Gas Pipe	1	Solution boiling over	1
Metal overflowing	1	Soot	12
Metal upsetting	2	Spark from Chimney	4
Men fighting	1	Spark from Casting	2
Mould bursting	1	Spark from Engine	1
Mistake of Exciseman	1	Spark from Forge	6
Mixing Composition	10	Spark from Flue	5
Mixing Colour	2	Spark from Furnace	15
Mixing Sulphur	1	Spark from Furnace of Threshing	
Muriatic Acid, Boiling	1	Machine	1
Naphtha	5	Spark from Fire	1255
Naphtha, Boiling	3	Spark from Hot Plate Flue	2
Naphtha, Bottle of, Breaking	1	Spark from Locomotive	7
Naphtha, Cask of, Exploding	3	Spark from Moulding	1
Naphtha, Upsetting	1	Spirits boiling over	2
Night Lights	2	Spirit Cask leaking	1
Oil, Boiling of	24	Spirit Cask, Filling of	1
Oil boiling over	6	Spirit falling on Fire	1
Oil Cask bursting	1	Spirit falling on Gas Stove	1
Oil Lamp	1	Spirit Lamp	18
Oil Lamp, Upsetting	1	Spirit overflowing	5
Oil thrown on Dung Heap	1	Spirit of Nitre	1
Old Age	3	Spirits of Wine	1
Opening a Pipe	1	Spirit thrown on Fire	1
Oven	13	Spontaneous ignition	274
Oven adjoining	3	Steam	2
Oven, Defect in	7	Steam Boiler	11
Oven falling in	2	Steam Boiler exploding	2
Oven Fire, Spark from	1	Steam Boiler, Overheat of	20
Oven Flue	3	Steam Engine	19
Oven improperly set	2	Steam Furnace Flue	8
Oven, Overheat of	5	Steam Gauge bursting	1
Overheat of Gas in Ventilator	1	Steam Jacket	1
Packing	4	Steam Pipe	1
Painters at work	1	Steam Pipe bursting	1
Pan slipping	1	Steam Pipe, Overheat of	5
Pan Head blown off	1	Still	1
Pan of Composition igniting	1	Still bursting	10
Paper used to fan Fire	1	Still boiling over	2
Paraffin Oil upset	1	Still exploding	1
Paraffin, Drawing off	3	Still, Overheat of	1
Pasting Charts	1	Still Head blown off	15
Pitch boiling	9	Still, Heat from	1
Pitch boiling over	41	Still Head, Leakage of	9
Pitch, Drawing off	1	Still leaking	4
Pitching a Back	1	Stove	297
Pipe Stove	181	Stove adjoining	7

CAUSES.	TOTAL.	CAUSES.	TOTAL.
Stove adjoining set on Timber	1	Turpentine boiling over	2
Stove, Cabin	13	Turpentine, Drawing off	5
Stove, Defect in	6	Turpentine leaking	5
Stove, Heat from	65	Turpentine upset	5
Stove, improperly set	7	Turpentine warming	3
Stove, Overheat of	30	Turning off Gas	1
Stove on Floor	3	Varnish boiling over	31
Stove Pipe	57	Varnish, Drawing off	3
Stove, Portable	3	Varnish, Using, by Candle Light	1
Sugar Boiling of	2	Valve of Cylinder not fitting	1
Sugar, boiling over	2	Waggon driven too near Lamp	1
Sunlight Burner	2	Warming Bed	2
Sulphur	1	Warming Tap of Tank	1
Suspicious	5	Wax boiling over	4
Tar, Boiling of	33	Wax, Boiling of	2
Tar Copper leaking	4	Wax Taper	17
Tar, Light thrown into	3	Wax and Turpentine boiling over	1
Tar Pot boiling over	21	Woman falling into Fire	3
Tar Pipe bursting	1	Wood left burning in Stoke-hole	1
Tar taking Fire	2	Working late	4
Tarring a Water Butt	7	Working late on Sunday	1
Tarpaulin falling against Stove	1	Workmen	17
Tallow boiling over	6	Workmen Cooking	1
Thawing Water Pipes	4	Workmen's Fire	8
Timber under Hearth	32	Workmen's Fire, Spark from	1
Timber Funnel	2	Workmen trying if Camphor would	
Tinman's Stove	1	burn	1
Tiring Wheels	5	Workshop Fire	2
Trade	1132	Unknown	9557
Trying Annihilators	1		
Trying Signal Lights	1		
Turpentine	5		
		TOTAL	29,069

Here is a short abstract of the leading cases deduced from the preceding T.

	Number.	Per cent.		Number.	Per cent.
Candles	3218	11.07	Sparks of Fire	1299	4.47
Children playing, etc.	463	1.59	Spontaneous Ignition	274	.95
Curtains	2822	9.71	Stoves	489	1.67
Flues	2268	7.80	Other causes known	5639	19.40
Gas	2225	7.65	Unknown	9557	32.88
Lucifers	409	1.41			
Smoking Tobacco	406	1.40	Total Number	29,069	100.00

Then by way of supplement to the foregoing, we have Capt. Shaw's T. No. 108. [See page 148.]

1866.—From the 1st Jan. this year the protection of Lond. against fire passed under the control of the Metropolitan Board of Works. The details of its operations will be noted as we proceed.

During this year, too, there was founded the *London Salvage Corps*. It was to be supported by contributions from the fire offices transacting bus. in Lond. We shall give some details of its operations under date 1876.

Mr. C. F. T. Young, C.E., this year pub. his work : *Fires, Fire Engines*, etc., wherein he institutes the following comparison :

London occupies 120 square miles, and has a pop. of 3,000,000. It has 19 engine stations, with in the aggregate 10 steam engines and 33 hand engines—total 43 : number of men employed 132. Therefore London has 1 station to every 6 square miles, 1 engine to every 3 square miles, 1 (and a fraction) men to the square mile ; and 1 man to 20,000 inhabitants.

New York occupies 23 square miles, has a pop. of 1,000,000, 35 fire stations, 40 fire engines—35 steam, 5 hand—and 1478 men. Consequently New York has $1\frac{1}{2}$ engine stations to each square mile ; $1\frac{3}{4}$ engines to the square mile ; 64 men to the square mile, and 1 man to every 676 of the inhabitants.

Paris occupies 110 square miles, has a pop. of 1,700,000, has 130 fire engine stations, and 1270 men. Therefore Paris has $1\frac{1}{6}$ engine stations to each square mile ; nearly $1\frac{3}{4}$ engines to the square mile ; has over 11 firemen to the square mile, or 1 man to every 1338 of the pop.

In the same work the author remarks upon the tendency of fires in Lond. not only to become more numerous, but of greater extent, and therefore involving far greater losses upon the ins. offices ; while the means of controlling them had not increased in the like proportion. "One great reason for this may be the tendency to construct large buildings, which are not sufficiently sub-divided to render it easy to attack the fire as it were in detail ; and in spite of the Building Act this course seems to be persisted in, especially in the case of large buildings called Manchester warehouses. Mr. Vulliamy, Architect to the Metropolitan Board of Works, and who, it is said, has the means of collecting accurate information upon the subject, states that in Lond. the 'total loss,' or fires in which everything is totally destroyed, amounts to rather over 14 p.c. of all the fires during the year."

[The following is the T. (No. 108) referred to on the previous page.]

Average Cost of Extinguishing Fires, etc.

Year.	No. of Fires.	Yearly Expenditure.			Average Cost of each Fire.		
		£	s.	d.	£	s.	d.
1833	458	7,988	7	7½	17	8	10
1834	482	9,277	8	6½	19	4	11
1835	471	10,410	3	10½	22	2	0
1836	564	11,765	12	2½	20	17	2
1837	501	14,252	10	9½	28	9	0
1838	568	12,186	14	4½	21	9	1
1839	584	11,925	8	8½	20	8	5
1840	681	13,606	4	11½	19	19	7
1841	696	12,498	12	8½	17	19	2
1842	769	12,646	4	11½	16	8	11
1843	749	12,518	9	10½	16	14	3
1844	762	13,019	6	2½	17	1	9
1845	707	12,804	2	6	18	2	3
1846	834	14,031	7	7	16	16	6
1847	836	18,119	1	9½	21	13	6
1848	805	14,228	7	4	17	13	6
1849	838	13,954	3	1	16	13	0
1850	868	13,801	11	1½	15	18	0
1851	928	15,976	4	5	17	4	4
1852	923	16,540	15	10	17	18	5
1853	900	14,913	5	6	16	11	5
1854	953	15,931	0	5½	16	14	4
1855	982	21,286	10	0	21	13	6
1856	957	17,777	12	8	18	11	6
1857	1115	18,370	7	4	16	9	6
1858	1114	18,326	17	0	16	9	0
1859	1089	17,615	6	6	16	3	6
1860	1056	25,108	1	9	23	15	6
1861	1183	23,157	13	8	19	11	6
1862	1303	22,964	16	10	17	12	6
1863	1404	23,416	17	0	16	13	7
1864	1487	24,120	9	11	16	4	5
1865	1502	26,005	4	7	17	6	3
TOTAL	29,069	£530,545	1	8½	£18	5	0

[Some evidence regarding the cost of extinguishing fires in other countries was given by Captain Shaw before the Parl. Committee in 1867, and will be found in this art. under that date. The thanks of the entire body of Fire Underwriters are due to Capt. Shaw for presenting the preceding statistics in a form so useful for reference. Of the principal T. we have only given an abstract of the results—the details being omitted. Captain Shaw's book is still to be obtained.]

Mr. David Smith, Man. of *North British and Mercantile*, gave evidence before the Parl. Committee on Fire Protection, 1867, and stated in regard to the Edin. office of his Co. the following facts relating to 1866: The total number of fires reported was 378; the cause of fire was ascertained in 226 cases, but in the remaining 152 cases it was not discovered. Thus 40 p.c. of the whole remained in doubt: but while the number of unknown causes was only 40 p.c., the amount of loss involved by these was 80 p.c. of the entire loss of the year. Thus each fire arising from unknown causes was twice as destructive as those from causes which could be ascertained. This is an aspect of the subject which requires further elucidation. The total amount of loss in the whole 378 cases was £47,300. It will be remembered that the risks in Edin. are mostly private dwellings and shops.

1867.—A Select Parl. Committee was appointed "to inquire into the existing Legislative Provisions for the Protection of Life and Property against Fire in the U.K., and as to the best means to be adopted for ascertaining the Causes and Preventing the Frequency of Fires." The results of the labours of this Committee we have already noticed under various heads, more especially under FIRE PROTECTION. There still remain several points of importance to be considered here.

One of the points to which especial attention was given was that of "Fires from unknown Causes." The Committee say in its Rep. (p. ix.) regarding these:

There is no doubt that the causes of a considerable number of fires will never be discovered, as a fire frequently destroys any traces of evidence that might lead to the discovery of its cause; but

almost all the witnesses who have devoted any attention to this subject concur in the opinion *that an inquiry made into all fires would have the effect not only of discovering the causes of many fires unknown, but of reducing the gross number of fires.*

This suggestion has already been considered under FIRE INQUESTS. Captain Shaw handed to the Committee the following :

Table of Known and Unknown Causes of London Fires for 34 Years.

YEAR.	Total Number of FIRES.	CAUSES.		PER-CENTAGE.	
		Known.	Unknown.	Known.	Unknown.
1833	458	404	54	88'2	11'8
1834	482	340	142	70'6	29'4
1835	471	378	93	80'3	19'7
1836	564	456	108	80'9	19'1
1837	501	392	109	78'2	21'8
1838	568	451	117	79'4	20'6
1839	584	454	130	77'7	22'3
1840	681	528	153	77'6	22'4
1841	696	559	137	80'3	19'7
1842	769	585	184	76'0	24'0
1843	749	563	186	75'2	24'8
1844	762	571	191	74'9	25'1
1845	707	527	180	74'5	25'5
1846	834	626	208	75'0	25'0
1847	836	588	248	70'3	27'7
1848	805	549	256	68'2	31'8
1849	838	612	226	73'0	27'0
1850	868	647	221	74'5	25'5
1851	928	664	264	71'6	28'4
1852	923	616	307	66'7	33'3
1853	900	564	336	62'7	37'3
1854	956	597	359	62'4	37'6
1855	982	627	355	63'8	36'2
1856	957	558	399	58'3	41'7
1857	1115	692	423	62'0	38'0
1858	1114	669	445	60'0	40'0
1859	1084	624	460	57'6	42'4
1860	1056	618	438	58'6	41'4
1861	1188	653	535	55'0	45'0
1862	1303	809	494	62'0	38'0
1863	1404	917	487	65'3	34'7
1864	1487	1013	474	68'1	31'9
1865	1502	896	606	59'7	40'3
1866	1338	755	583	56'4	43'6
TOTAL	30,410	20,502	9908	67'4	32'6

He further stated in his evidence that the proportion of fires from "unknown causes" had been found to be as follows in the following cities at the periods named :

London	in 1866	about 44	} per cent. of all the fires.	Montreal	in 1865	about 42	} per cent. of all the fires.
Liverpool	in 1862	" 66		New York	in 1861	" 47	
Dublin	in 1864	" 40		"	in 1862	" 38	
"	in 1865	" 55		Troy, no year named	"	63	
Sidney	in 1865	" 35		St. Louis, ditto	"	36	
Montreal	in 1864	" 43		San Francisco, ditto	"	73	

We have seen that in some of the later returns from these same cities the proportion of "unknown" causes is very much smaller.

Mr. Fletcher, the then Sec. of the *Sun* Fire, stated in his evidence, that in the years 1864 and 1865 the losses of 17 English offices were compared. They were in number 14,458, and amounted to upwards of £1,250,000. Out of these fires, there were no less than 4623 the cause of which could not be ascertained.

The question of the "Loss to the Nation"—the political economy aspect of the case—was considered by the Committee ; and the following is the substance of the evidence of Mr. S. J. Fletcher (*Sun* Fire) thereon :

1506. In looking to this question, do you think it is a serious loss to the nation that so much property is destroyed by fire?—Very considerable loss is incurred by the nation by intentional fires. In other similar cases an inquiry takes place, in cases of accident by railway or to shipping ; but it is

curious that there is no inquiry on the part of the public by any public machinery with regard to the question of fires, by which so large an amount of property is annually destroyed.

1509. Have you ever noticed any distinction in the number of fires when trade is good, and when trade is bad?—That occurs continually. When there is a depression in any particular trade, then the fires in that particular trade commence; that is one of the points which satisfies me that many fires are intentional: if the cotton trade is depressed, mills and cotton warehouses are burned down, and so with the hat or shoe trade, if there is depression, fires immediately follow.

1510. That is a sort of fire-barometer?—Decidedly; it is a well-known fact.

1511. Does that extend to farm produce?—I think it does; very many fires are attributed to incendiarism, in the country, I am satisfied are occasioned by the farmers themselves.

1512. The working of the law in question is peculiarly noticeable in Liverpool, is it not?—In Liverpool, Manchester, and every other place: and it is convincing to me that a much greater number of fires than we are apt to think are the result of intention.

The Committee passed on to what may be designated a very natural question:

1579. Perhaps you are aware that there has been produced some impression in the country that ins. offices, so far from being averse to fires, do not at all object to a certain amount of fires?—(Mr. Fletcher.) If such an opinion as that is prevailing, it is entirely in contradiction to the convictions of my office. They are making every effort which can be made to prevent the increase of fires.

1580. Do they not fancy that a certain number of fires, if not attended with too great a loss of property, rather give a spur to fresh policies?—It is a most mistaken notion.

Another point which engaged the attention of the Committee was "whether fires were actually on the increase," that is, relatively to the number of the pop., or to the number of buildings. Several witnesses were examined on this point. Mr. Swanton, Supt. of the London Salvage Corps, said the proportion was increasing, and handed in the following returns for London in support of his position.

Table showing the increase of Fires upon the Pop. and Number of Houses for the Years 1852 and 1862.

1852.—Population, 2,362,263—fires, 923. There was 1 fire for every 2559 persons, according to the number of persons shown by the Census of 1851.

„ Houses, 327,391—fires, 923. There was 1 fire for every 354 houses, according to the number of houses shown by the Census of 1851.

1862.—Population, 2,803,989—fires, 1303. There was 1 fire for every 2152 persons, according to the Census of 1861—being an increase of nearly one-fifth.

„ Houses, 379,222—fires, 1303. There was 1 fire for every 291 houses, according to the number of houses at the Census of 1861—being an increase of over one-fourth!

Captain Shaw was also examined on the same subject, and he handed in returns of a more complete order, from which we compile the follow T.

Twenty-five Years' Fires in London.

Year.	Fires.	Population.	Houses.	People to each Fire.	Houses to each Fire.
1840	681	1,907,036	258,425	2800	379'47
1841	696	1,948,417	262,744	2800	377'50
1842	769	1,989,719	267,062	2588	347'28
1843	749	2,031,181	271,381	2725	362'32
1844	762	2,072,563	275,700	2720	361'81
1845	707	2,113,945	280,029	2990	395'08
1846	834	2,155,326	284,338	2584	340'93
1847	836	2,196,708	288,657	2628	345'28
1848	805	2,238,090	292,976	2780	363'94
1849	838	2,279,472	297,295	2720	354'76
1850	868	2,320,854	301,614	2673	347'48
1851	928	2,362,236	305,933	2546	329'67
1852	923	2,406,411	311,281	2607	337'24
1853	900	2,450,586	316,629	2723	351'81
1854	953	2,494,762	321,978	2618	337'85
1855	982	2,538,937	327,327	2585	333'32
1856	957	2,583,112	332,676	2699	347'62
1857	1110	2,627,288	338,025	2356	304'52
1858	1114	2,671,463	343,374	2398	308'23
1859	1089	2,715,638	348,723	2494	320'22
1860	1056	2,759,814	354,072	2613	335'29
1861	1183	2,803,989	359,421	2370	303'82
1862	1303	2,851,145	366,045	2188	280'92
1863	1404	2,898,301	372,669	2064	265'42
1864	1487	2,945,457	379,293	1980	255'08

In Paris there were 135 fire brigade stations, with 180 engines, and an organized force of 1200 men, divided into 10 companies. One corporal and two firemen are constantly on duty at each station. The engines in use are so light that they can be carried into the upper stories of a building if necessary. This distribution of the fire apparatus enables a number of trained firemen to be on the spot within a minute or two after a fire is discovered.

Mr. Swinton Boulton, the then Manager of the *Liverpool, London, and Globe Ins. Co.*, handed in a

Table showing the fires have increased in an undue ratio to the increase of Population and Houses.

In 1845, there was one Fire to every 2990 of the Pop., and to every 395 Houses.

1850	"	2673	"	347	"
1855	"	2585	"	333	"
1860	"	2613	"	335	"
1861	"	2370	"	303	"
1862	"	2188	"	280	"
1863	"	2064	"	265	"
1864	"	1980	"	255	"
1865	"	1900	"	250	"

He also handed in another T. showing the increase in the number of fires recorded as of "suspicious, doubtful, or unaccounted for" origin, which we have already given under FIRE INQUESTS at this date.

Another subject considered was "The Cost of Fires," that is, the cost of attending them by the brigades. This varies very much in different countries, perhaps in consequence of the different system pursued. Captain Shaw produced these figures to the Committee:

Liverpool,	average cost of each fire	£12
London	"	over 18
Dublin	"	20
Montreal	"	over 32
Brooklyn	"	35
Philadelphia	"	48
Sydney	"	52
Troy (United States)	"	63
Buffalo	"	85
Baltimore	"	90
San Francisco	"	118
St. Louis	"	125
Boston	"	157
New Orleans	"	172

In order to test these results, it would be necessary to have a return of the actual average destruction of property at each fire.

The Fire Marshal for the City of *New York*, in his Rep. for 1867, gives the following telling summary of his labours:

During the first year of my investigations, that is to say from the 1st of June, 1854, to the 31st of May, 1855, there were 395 fires. Of that number, as shown by my rep. made at that time, 168 were of incendiary origin, or about 42½ p.c. On referring to my reports for the twelfth year of my official investigations (1867), it will be found that there were 780 fires, of which 121 only were of incendiary origin, or about 15½ p.c. of the whole number. The large increase of the number of fires may be attributed to the rapid growth of our city pop., and also to habits of carelessness and recklessness acquired by our citizens during the war. I have caused to be prosecuted, since I came into office, 71 incendiaries, and of that number 56 have been convicted (averaging 4½ each year) and sentenced to the State prison and penitentiary, for from one to 15 years, and several for life. The difficulty of obtaining evidence to procure convictions in arson cases is well understood by the legal profession; and that 80 p.c. of those tried should be convicted is, I think, evidence of the care and zeal exercised in their prosecution.

1868.—The returns of the *Manchester* Police for the year ending 29 Sept. inst. gave the number of fires which were attended within that city, viz. 301, which was an increase of 16 upon the previous year. The following details as to the proportions of buildings and stock insured and uninsured are valuable. Buildings insured 202, amount £251,922; not insured 95, amount £105,291. Stock, number insured 127, amount £483,531; not insured 165, amount £103,721; total at risk £944,465. The loss of the year was found to be but £2 3s. p.c. upon the entire property at risk within the city. The total cost of the Brigade during the year was £3523 17s. 1d. Here we have two-thirds of the buildings insured; but much less than half the stocks so protected. The larger number of stocks at risk arises from the circumstance of several persons occupying one building frequently.

1869.—By 32 & 33 Vict. c. 14, the per-centage duty on Fire Ins. was entirely abolished. The stamp duty of 1d. p. pol. being retained.

A correspondent of the *Post Mag.*, under designation of "B," Glasgow, 12 April, 1869, suggested that the net rate (he terms it the "real worth") for special risks might be ascertained by forming "what might be called a 'T. of Mort.' for each separately." The materials for such a T. he thought "might be obtained if the offices would furnish a statement of their respective experience of each kind of risk in each year in which they have insured it; say, 1. Number insured; 2. Average amount on each; 3. Losses." In the U.S. this is steadily being accomplished. [FIRE INS. CENSUS.] [FIRE INS., CLASSIFICATION OF RISKS IN.]

The following interesting returns of fire bus. in *Canada* for this and the preceding year were compiled upon authentic data ;

	1868.	1869.
Premis. received	\$1,822,602	\$1,921,968
Amount of pol. (sum insured)	115,344,331	181,140,476
Total at risk	167,653,894	193,649,810
Losses paid	985,494	1,033,398
Losses in expense	60,178	131,289
Losses resisted	45,484	75,406

The above includes only the bus. of the licensed cos. ; there is a large number of mutuals, some of them very small, and others doing a considerable business, which compete for the insurance business of *Canada*. The aggregate of their premis. would represent a respectable sum, but cannot be easily ascertained.—*Monetary Times*.

The Rep. of the Fire Marshal of *New York* for the year ending the 1st Oct. 1869 contained, among other interesting and valuable tables, one of peculiar significance, giving the nationality of persons occupying premises in which fires originate in this city. They run as follows :—

Germans	369
Americans	263
Irish	185
English	57
French	23
Spanish	2
Italians, Danish, Africans, each	1

In order to complete this comparison, the proportions of these nationalities which make up the pop. of *New York* should be given. The *Ins. Monitor* of N.Y. in reviewing this return, took the occasion for a little plain speaking as follows :

Here are some stubborn statistics, which show that more than 40 p.c. of ALL the fires in the city of N.Y. occur in premises occupied by Germans ; and also that, as compared with the native pop., the proportion of fires attributed to the Germans is 40 p.c. in excess. That is, for every 10 houses occupied by natives, 14 occupied by Germans are the sources of fires ! These figures, as observed, are stubborn things, and they are as significant as stubborn ; and we call upon Fire Marshal Brackett, and we hope that the underwriters will officially call upon him, for still further specifications. We wish to have it developed whether the fair-haired, blue-eyed, lager-drinking, waltz-dancing, laughter-loving, jovial, thrifty Teutons are THE Germans who furnish the above statistics. Are they these, or are they the black-eyed, curly-haired, swarthy, crook-nosed Germans "vat sells dings sheep" on Chatham-street, etc. Here is an opportunity to confirm or refute the stigma that has hitherto rested upon what underwriters have designated as "Jew Risks," and we sincerely trust that the inquiry will be pushed to a finality, and all the facts involved in the above startling disclosures brought to light. The published report of the Fire Marshal, classifying the risks burned, does not give the necessary clue. There is no sub-division of stores except "stores and dwellings."

1870.—The "Life Assurance Companies Act, 1870," has afforded the means of obtaining some valuable statistics in regard to certain of the British fire offices, viz. those which also have a life business carried on under the same Deed of Constitution. In the returns which they file ann. under this Act they are required to separate other branches of bus. from the life accounts. We shall furnish some of the returns so obtained later as we proceed.

Capt. Shaw, Chief of the Metropolitan Fire Brigade, pub. this year : *Records of the late London Fire Engine Estab.*, from which we have already drawn various important statistics under date 1865.

The return of the Fire Marshal of *New York* for the year ending Oct. 31, 1870, showed the number of fires to have been 856, or about 16 p. week ; and the aggregate loss to have been £550,960. The total ins. upon the properties burned and damaged was £2,105,589. The claims were therefore less than 25 p.c. on the amount insured. The taxable value of the property of the city was £209,499,689 ; an assessment therefore of 26 cents and 3-10ths (1s. 1d.) would have carried the loss.

The entire losses by fires in the U.S. at this date were estimated as not exceeding £10,000,000 p.a. (See 1876.)

In the City of *Chicago*, which consisted of 300,000 people, "dwelling, working, and worshipping in 55,000 buildings," there were 700 fires large and small this year (1870). The figures for several preceding years had been : 1867, 515 ; 1868, 468 ; 1869, 490. The average of fires this year was one to each 78 buildings. In 1868 it was 1 to each 97 buildings. The total losses from the fires of 1870 amounted to £461,119. The amount paid by the ins. offices was £410,194. The number of fires in each month of the year was, Jany. 63, Feb. 70, Mar. 45, April 59, May 57, June 55, July 70, Aug. 72, Sept. 53, Oct. 43, Nov. 51, Dec. 62.

1871.—The Ed. of the *Review Ins. Journ.* made an attempt, which on the whole must be regarded as creditable in its results—seeing the difficulties in the way—to present a statement of the financial positions of the several fire ins. asso. transacting bus. in the U.K. at this date. The following is the T. Its figures will mostly relate to 1871, but in some important cases, as the *Royal*, and others, they relate to the previous year. The figures are stated to be derived from pub. documents :

Date of Etab.	NAME OF OFFICE.	CAPITAL.		Reserve Funds, Exclusive of Cap. and Life and Marine Reserves.	Prem. Receipts, 12 Months. Previous to Date of last Report.	Losses in 12 Months Previous to Date of last Rep.
		Subscribed.	Paid-up.			
1696	Hand-in-Hand	£ Mutual	£ Mutual	£ 107,709	£ 15,813	£ 4,116
1710	Sun .....	.....	.....	.....	.....	.....
1714	Union	300,000	30,000	548,024	37,685	22,187
1717	Westminster	Mutual	Mutual	136,027	51,511	32,518
1720	Royal Exchange	689,220	689,220	859,179	126,147	56,896
1720	London Assurance	896,550	448,275	564,658	126,280	43,245
1780	Salop	210,000	60,000	6,200	.....	.....
1782	Phoenix .....	.....	.....	.....	.....	.....
1797	Norwich Union	550,000	.....	.....	.....	.....
1802	Essex and Suffolk	Mutual	Mutual	66,085	18,666	12,219
1802	Kent .....	.....	.....	.....	.....	.....
1803	Imperial	1,600,000	700,000	358,000	.....	.....
1805	Caledonian	298,075	29,807	117,154	20,161	11,797
1806	County	700,000	40,000	.....	.....	.....
1807	West of England	600,000	210,000	54,550	103,980	71,964
1808	Atlas	1,200,000	138,000	121,016	80,144	41,144
1809	North Brit. & Mercantile	2,000,000	250,000	528,803	660,618	645,105*
1821	Guardian	2,000,000	1,000,000	201,067	106,710	51,206
1822	Azienda (of Trieste)	400,000	101,490	318,539	.....	.....
1822	National of Ireland	1,000,000	100,000	25,000	13,012	4,286
1824	Alliance	5,000,000	550,000	145,793	167,994	79,122
1824	Manchester	1,000,000	100,000	29,408	109,930	59,782
1824	Patriotic of Ireland	1,500,000	132,150	9,782	9,023	2,884
1824	Scottish Union	5,000,000	207,571	108,607	57,930	29,893
1824	Yorkshire	500,000	50,000	79,400	49,529	22,112
1825	Scottish Provincial	1,000,000	50,000	49,089	22,696	17,510
1829	Norwich Equitable	250,000	.....	.....	.....	.....
1836	Northern	2,000,000	97,245	174,290	213,652	93,885
1836	Liverpl., Lond. & Globe	2,000,000	391,752	845,128	1,131,594	1,178,749†
1837	Shropshire & N. Wales	100,000	56,000	5,000	.....	.....
1837	General	1,000,000	50,000	4,045	39,428	30,111
1840	Church of England	1,000,000	40,000	7,178	4,649	1,023
1840	Royal Farmers'	500,000	72,962	64,963	45,107	27,028
1841	Scottish National	200,000	55,000	23,069	17,846	14,795
1845	Law	5,000,000	125,000	41,210	50,115	21,161
1845	Royal	1,923,000	289,095	348,031	511,836	339,810
1851	Midland Counties .....	.....	24,979	4,981	10,392	5,093
1852	Lancashire	2,000,000	146,140	61,100	106,134	64,425
1852	Provincial	200,000	20,000	.....	64,667	39,981
1854	Law Union	1,000,000	37,500	13,214	21,233	12,250
1855	Emperor	20,000	4,000	.....	.....	.....
1857	Queen	1,911,720	191,172	118,447	139,809	86,953
1861	Commercial Union	2,500,000	250,000	138,880	125,162	75,742
1862	Lond. and Lancashire	1,000,000	134,137	.....	.....	.....
1864	Lond. and Southwark	500,000	28,095	.....	46,692	48,427
1864	Scottish	1,000,000	40,000	10,000	.....	.....
1865	Scottish Commercial	1,000,000	51,425	24,503	54,407	34,852
1865	Scottish Imperial	1,000,000	25,000	1,476	34,391	29,528
1866	General Guarantee	6,348	6,249	.....	.....	.....
1868	Britannia	250,000	50,000	3,479	25,000	34,872‡
1869	Town and County	35,500	3,532	.....	3,007	854
1869	Northern Counties	100,000	25,000	699	13,512	6,088
1870	Primitive Methodists	10,000	25	.....	.....	.....
1870	London and Midland	51,200	5,120	.....	1,621	851

* Includes £325,000 losses at Chicago.

† Includes £614,000 losses at Chicago.

‡ Includes £9559 losses at Chicago.

In our art. FIRE INS., HIST. OF, will be found some statistics of interest regarding the losses of the Brit. fire offices in Chicago; and on other points.

As a key to the increase of fire ins. in one branch of bus. alone, we present the following figures from the *Builder*: "We have built in E. and W., in the way of dwelling-houses alone, upwards of 1000 millions' worth of property, roughly speaking, since the year 1801; and within the ten years only between 1861 and 1871 we have built dwelling-houses to the value of more than £220,000,000 sterling."

1872.—The following returns relating to 26 of the Brit. F. offices may be taken as supplemental to the details given under this date in our art. FIRE INS., HIST. OF. We prefix the figures of the year 1870 for the purposes of comparison :

Name of Office.	1870.			1872.		
	Fire Premiums.	Losses.	Per-centage.	Fire Premiums.	Losses.	Per-centage.
Alliance	£ 164,156	£ 86,624	52.7	£ 181,370	£ 63,448	34.9
Atlas	81,423	65,532	80.4	91,169	61,829	67.8
Britannia	14,584	9,434	64.7	38,808	27,001	69.5
Caledonian	20,161	11,797	58.5	22,513	11,477	50.9
Commercial Union	125,162	75,742	60.5	270,080	202,858	75.1
General	39,429	30,111	76.6	44,881	21,315	47.5
Guardian	106,711	51,206	48.	144,427	56,144	38.8
Hand-in-Hand	15,094	15,049	99.7	16,898	2,936	17.3
Lancashire	102,284	45,917	44.8	175,955	114,791	65.2
Law	51,277	22,049	43.	54,938	15,913	28.9
Law Union	20,437	12,180	59.5	22,417	9,713	43.3
Liverpool & Lond.	931,728	528,384	56.7	1,258,584	1,071,494	85.1
Lond. Corporation	117,890	48,906	41.5	180,460	116,690	64.6
Lond. & Southwark	46,692	48,427	103.7	106,105	119,737	112.8
Northern	213,652	93,885	43.9	270,427	133,250	49.2
N. Brit. & Mercantile	555,179	323,925	58.3	794,315	504,366	63.5
Northern Counties	12,444	6,072	48.8	17,467	10,439	59.7
Provincial	59,808	41,899	70.	59,819	40,554	67.8
Queen	139,809	86,953	62.2	265,659	237,207	89.2
Royal	511,837	339,810	66.3	816,383	643,195	78.7
Royal Exchange	126,148	56,897	45.1	139,600	76,034	54.4
Scottish Commercial	45,244	22,767	50.3	67,818	44,391	65.4
Scottish Imperial	34,392	29,528	85.8	61,094	37,832	61.9
Scottish Provincial	22,697	17,511	77.1	25,310	14,089	55.6
West of England	103,980	71,965	69.2	114,561	54,836	47.8
Yorkshire	49,529	22,113	44.6	56,674	30,965	54.6
TOTAL	3,711,747	2,164,683	58.3	5,297,762	3,722,504	70.2

It appears from these figures that in the two years the increase in prem. income in these offices had been no less than 42 p.c., and although the claims, in consequence of the Boston fire, ran up from 58.3 p.c. in 1870 to 70.2 in 1872, it is seen that, as a whole, the result of 1872 was not unsatisfactory. If we deduct from the total losses in 1870 the amount paid in *Boston*, which was not less altogether than £750,000, we arrive at an average of 56 p.c., which is within that calculated by fire managers.

The prosp. of the Fire Re-Ins. Corp. (issued in 1874) gave the following statistics as applicable to this year : There were in Gt. Brit. and her colonies more than 100 fire ins. offices possessing a prem. income ranging from £10,000 to over a million stg. p.a. On the Continent of Europe there were about 150 similar cos. ; and in the U.S. more than 300. Their aggregate incomes were estimated at £60,000,000 p.a. We suspect this to be too low an estimate. At all events, the aggregate of the smaller cos. has to be added, which would prob. put on another 10 millions—making the aggregate income of the fire offices £70,000,000 p.a.

The growing efficiency of the *Metropolitan* F. Brigade was made apparent by a very simple and yet practical test : In 1866 as many as 25 out of every 100 fires in Lond. caused heavy losses ; but in the six years following the proportion has been steadily decreasing, thus : 1867, 18 p.c. ; 1868, 14 p.c. ; 1869, 13 p.c. ; 1870, 14 p.c. ; 1871, 11 p.c. ; 1872, 8 p.c.

The Ann. Rep. of Capt. Ingram, Chief of the F. Brigade for *Dublin*, stated the alarms in 1872 to have been 188, of which 5 were false, 111 were only chimney fires, 72 were more extensive. Two of the fires resulted in total destruction of buildings, 12 in serious damage, and 55 in slight injury. Five persons were rescued by the fire escapes. The expense of the Brigade amounted to £1446 6s. 6d.

The returns of the fire ins. cos. of the *United States* after the great conflagrations of *Chicago* (1871) and *Boston* (1872) were looked forward to with much interest at the close of this year. Unfortunately there is no means by which the figures of the cos. of all the States can be reduced to one focus ; but we assume the returns of the N.Y. cos. may be looked upon in a great measure as representative. There were 91 fire ins. asso. belonging to the State, and 63 asso. belonging to other States, transacting bus. in N.Y. State in 1872.

The 91 asso. received in prems. during the year £4,066,714 stg.; and adding int. on investments, etc., their total cash receipts for the year were £4,870,702. The losses from fires amounted to £2,861,822. The dividends to stockholders paid by about 75 of the asso. amounted to £434,102; and this sum and the expenses of management made a total expenditure of £4,826,279. Dealing with the prems. as against the claims, there was a surplus of £1,204,892. Thus the claims were about 67 p.c. of the prems., leaving 33 p.c. for expenses, dividends, etc. The surplus held by the 91 cos.—exclusive of stock, “profit scrip,” and re-insurances—was £3,223,629. This was a better state of things on the whole than at the close of 1871; but some of the individual cos. were undoubtedly weak.

Of the 63 cos. of other States, they received in prems. during the year £4,795,087, and from all sources £6,328,193. The fire claims amounted to £4,007,584. The dividends to stockholders paid by 34 of them reached £211,432. Their total disbursements reached £6,273,320. Taking the prems. as against the claims, there was a margin of only £787,403; so that the claims were 84 p.c., leaving only 16 p.c. for expenses, dividends, re-insurances, etc. The surplus held by the 63 cos. over liabilities, exclusive of stock, “profit scrip,” and re-insurances, was £3,559,817; so that on the whole the 63 “foreign cos.” shared rather worse than the 91 home cos. (See 1875.)

The losses of the French fire offices this year were understood to be under 40 p.c. of the prems. of the year.

The Journ. of the Royal Statistical Bureau of Prussia contained an elaborate review of the statistics of fire ins. in Germany at this date. It will be dealt with under GERMANY, sub-heading *Fire*.

At the International Statistical Congress held at St. Petersburg in 1872, Prof. G. Mayr, of Munich, was appointed to collate ins. statistics. But up to the close of 1873 he had made no actual progress in the work.

1873.—In our art. FIRE INS., HIST. OF, under this date, we quote from the *Review* some passages of an art. wherein the desirability of more detailed investigation into the causes of fires in regard to particular classes of risks is urged; and some suggestions are offered regarding the fluctuations in the fires happening to various classes of risks. This latter point we shall again refer to under FLUCTUATIONS FROM AVERAGES.

We are glad to obtain a glimpse of the results of fire underwriting in Australia. The prems. received in 1873 by all the offices transacting fire bus. there amounted to £78,937. The losses for the same period (partly approximated) reached £96,470. Add for commission and expenses 27½ p.c. on the prems.—£21,707, and there is a loss upon the year's transactions of £39,240. These figures were compiled by a person well informed, who feared that the results for 1874 would not be much more encouraging. “Low rates and continued losses” were causing various agencies to be closed.

In the *N. American Review* there was an art. by Mr. Bugbee, wherein he gave some statistics which we make supplemental to our art. FIRE BRIGADES, FOREIGN, as they are also supplemental to the statistics which we have given in this art. under date 1867:

1. Fire Brigades.

Place.	Population.†	Area in Square Miles.	No. of Fires.	No. of Steam Engines.	No. of Firemen.	Expenses of Department.	Expense per Capita.*
London	3,340,000	122	1494	28½	396	£ 68,617	5d.
New York	980,000	22	1380	38	629	\$ 997,266·67	\$ 1·02
Philadelphia	709,000	129	655	24	253	407,737	57½
St. Louis.....	360,000	—	197	11	110	166,315	46½
Chicago	380,000	23½	489	16	201	382,000	1·00
Baltimore	281,000	15	172	10	151	160,635·46	57
Boston	260,000	15½	389	21	459	400,000	1·54
Cincinnati	221,000	22	213	19	154	281,935	1·27

2. Fire Losses.

	No. of Dwelling-houses.	Total loss for past Five Years.	Loss per Capita.*
New York	64,044	\$ 15,831,859	\$ 16·80
Philadelphia	112,366	11,470,941	16·17
St. Louis	39,675	4,124,130	13·26
Chicago	44,620	9,068,041†	30·39
Baltimore	40,350	1,772,370	6·63
Boston	29,623	3,271,118†	13·08
Cincinnati	24,550	3,576,766	16·56
San Francisco	25,905	2,795,387	18·75

[For foot notes referred to in the above tables, see top of next page.]

* The loss per capita (as also the number of houses) is based on the census of 1870, as it would be a fair average for the years covered in the statement of losses.

+ Exclusive of the great fire.

† In the American cities the census of 1870 is taken, and the natural increase for two years added.

‡ Including three floating engines.

1874.—The contributions which the ins. offices transacting fire bus. in Lond. have to make to the Metropolitan Board of Works under the Act of 1865 [FIRE PROTECTION], viz. £35 per million of sums insured, enables us to obtain some knowledge of the progress of fire ins. in Lond. The amount of ins. in force in 1864 was upwards of £540,000,000; and the sum appears to be progressing at the rate of about 20 millions p.a. The following return shows the relative positions of the offices regarding London bus.

Name of Ins. Co.	Bus. done in 1874, as per certified returns in form prescribed by the Board.	Amount of Yearly Contribution at £35 per million.
	£	£ s. d.
Sun	73,136,500	2559 15 8
Phoenix	55,340,950	1936 18 8
North British and Mercantile	34,642,520	1212 9 6
Liverpool and London and Globe	32,434,822	1135 4 4
Law	32,357,927	1132 10 8
Imperial	30,185,000	1056 10 0
Royal Exchange	29,360,818	1027 12 8
County	24,375,617	853 3 0
Royal	23,441,360	820 9 0
Westminster	22,046,331	771 12 4
London	19,748,515	691 4 0
Union	17,407,817	602 5 4
Atlas	17,323,658	606 6 8
Commercial Union	15,382,554	538 7 8
Guardian	14,876,320	520 13 4
Alliance	13,238,003	463 6 8
General	8,635,797	302 5 0
Northern	8,621,363	301 15 0
Norwich Union	8,541,050	298 18 0
Hand-in-Hand	7,460,000	261 2 0
Law Union	5,419,759	189 13 8
Yorkshire	5,237,787	183 6 8
Manchester	4,748,798	166 4 0
Lancashire	4,500,000	158 10 0
Queen	4,422,241	154 15 8
London and Lancashire	3,887,989	136 1 8
Scottish Union	2,988,081	104 11 8
London and Southwark	2,769,156	96 18 3
Kent	2,724,180	95 7 0
Church of England	1,513,359	52 19 4
Scottish	1,473,000	51 11 0
Royal Farmers	1,138,025	39 16 8
Scottish Commercial	1,017,413	35 11 0
Britannia	1,000,000	35 0 0
Great Britain	1,000,000	35 0 0
National of Ireland	1,000,000	35 0 0
Scottish Provincial	1,000,000	35 0 0
Scottish Imperial	929,957	32 11 0
Azienda Assicuratrice	827,519	28 19 4
Staffordshire	592,397	20 14 8
Scottish National	578,745	20 5 0
Caledonian	412,919	14 9 0
Magdeburg	352,464	12 6 8
Universal	280,018	9 16 0
Emperor	242,783	8 10 0
Border Counties	240,000	8 8 0
British National	211,000	7 7 8
Midland Counties	163,545	5 14 8
Norwich Equitable	150,826	5 5 8
Belfast	143,320	5 0 4
Home of New York	141,095	4 18 8
Anchor	132,325	4 12 8
Yorkshire	81,000	2 16 8
Preserver	56,958	2 0 0

Name of Ins. Co.	Bus. done in 1874, as per certified returns in form prescribed by the Board.	Amount of Yearly Contribution at £35 per million.
Provident	£46,925	£1 13 0
Mutual	40,300	1 8 4
Salop.....	35,800	1 5 0
Primitive Methodists	25,450	0 18 0
Equitable	19,100	0 13 4
La Confiance	17,650	0 12 4
Shropshire and North Wales.....	9,680	0 6 8
Essex and Suffolk	6,860	0 4 8
Household	6,150	0 4 4
Middlesex.....	3,130	0 2 0
Patriotic	1,350	0 1 0
Total.....	£540,146,582	£18,905 2 8

Mr. T. B. Sprague, in his *Life Ins. Accounts*, 1874, says (p. 153): "In the fire ins. bus. it is not so important to have the amount of new bus. stated; but it would be very desirable to have a return of the total sum remaining insured at the end of the year, arranged, if possible, according to the rate of prem. charged." The *Ins. Record* reviewer (30 July, 1875), commenting upon this passage, said, it was not "likely to commend itself to the managers of fire ins. cos., who knew the great amount of labour which such a return would entail on their clerks, and the small value which would attach to it, owing to many disturbing elements." This is not encouraging. We must see what is said upon the subject on the other side of the Atlantic.

The National Board of F. Underwriters, N.Y., having constituted a "Bureau of Statistics," with Mr. Henry H. Hall as chairman, began this year to show signs of work accomplished. "Proof-sheets" of a system of classification of "fire risks" were sent out for the approval of the fire underwriters of the world. The Committee said in the accompanying circular: "We aim to secure a perfect system of classification for the aggregated experiences of a large number of cos., so treating the various risks as to bring under their appropriate classes such as partake of the same inherent hazard. The question now is not the most convenient system for individual cos., but the best ideal plan for general imitation."

In furtherance of this design, the Ann. Rep. of the Committee on Adjustments and Statistics, presented to the Board in 1874, contained the following passage:

It cannot be truthfully said that the bus. of fire underwriting is one entirely without foundations; for whether it be realized or not, the entire fire bus. of the country is conducted on the experience of certain cos., but so few in number that one may count them on his fingers; and the conclusions drawn have not been from the combined experience even of those few, but have been what very few have suggested, and others have not contradicted. So few in number are the stones of the foundation, that the pyramid may be said to rest on its apex rather than on its base. The relation of tutor and pupils is not the highest type of union, nor is it one to attract strong adherents; and we trust that the efforts of our Committee have been in the direction of a more perfect manifestation of the idea of federation; in which the experience of the greatest is cheerfully given, and that of the smallest is courteously solicited. Believing that the interests of the National Board can best be promoted by making its foundations broad, and believing that the equity of our ratings, and the fallacies of those who dispute them, can best be proved by a mathematical demonstration, we have during the past year elicited statistical information from all possible sources, and herewith present the results to you. . . .

Our present Rep. represents the first effort ever made by the National Board to collate statistics of the results of fire underwriting on different classes of risk. We have ascertained that while the subject has been discussed by the Associated Tariff Offices of Gt. Brit., yet, aside from the classifications of individual cos., no systematic efforts have been made to secure combined results.

Elaborate statistics are then presented as to woollen mills, flouring mills, boot and shoe manufactories, paper mills, iron workers, steamboats, hardware manufactories, and wood workers, with a digest of results. We have already given this classification under FIRE INS. CENSUS. Mr. Chas. A. Jenney is the Sec. of Statistical Bureau of the N.B.

Mr. J. Griswold this year published in N.Y. a *Classification Register of Fire Hazards and Losses: comprising a System of Daily Memoranda, with Monthly and Ann. Classification, and Classified Causes of Fires, etc.* This consists of a most excellent arrangement of cols. and pages, adapted to 80 of the most prominent classes of risk; and capable of containing the returns for 10 years. We believe the Regis. is in common use in the U.S.; and we also believe that it only has to be known here to be brought also into general use. By its aid the pecuniary results of the leading classes of fire risks over one or any greater number of years can be clearly and continuously shown. We shall be happy to allow any one to inspect our copy.

Under date 1850 in this art. we have given some statistics of F. underwriting in the U.S. and in Canada during the first half of this century. We are now enabled to bring the facts in part down to the present date. Mr. Geo. T. Hope, the able President of the *Continental Fire of N.Y.*, is now our authority. His reasons for the investigation, and data upon which he has proceeded, are stated as follows, in a circular addressed to the agents of his co., and bearing date 22 Sept. 1874:

The assertions recently made by underwriters of experience and observation, that the entire ins. bus. of this country, from the beginning, has been transacted at a loss to the ins. cos., has led us to an investigation of all the statistics within our reach, and the results of that investigation we now place before you. They are extracted from the ann. rep. of the cos., made to one or another of the several State departments as required by law. They embrace the bus. of the 20 years preceding 1874, or so much of that time as the cos. analyzed have been in existence and have reported their bus. The number of cos. whose bus. is analyzed is 38, and the aggregate years amount to 516, making an average of 13 years for each co., 16 of the whole number being for the full term of 20 years. The results are deduced from the figures of each co. as made by its officers, except as to the amount of unearned prem.: these differ so widely in different statements in respect to cos. transacting, so far as can be estimated, the same character of bus., that it became necessary to assume a uniform ratio, and that adopted, while above the estimate of some of the cos., is below that of others, including this co. The cos. selected for this purpose (embracing both American and foreign cos.) have all transacted a general ins. bus., and have employed agents, and all of these cos. are still engaged in the bus. of ins. Some of them have transacted the bus. of marine and inland navigation ins. to some extent. The amount of this bus. is comparatively small, and the difficulty of its separation in regard to amount, losses, and expenses so great, that the effort was abandoned. Its effect upon the aggregate bus. is so small as to be unimportant.

These 38 cos. had "earned on prem. received" £54,258,673; and had paid for losses and expenses (not including in the latter any dividends or other compensation to the stockholders) £56,781,630—showing as a result the net loss of £2,522,957! Of the whole number, 31 showed a loss even at the rate of re-insurance assumed, and but 7 a profit; and Mr. Hope thought it prob. that some of these would be trans. to the loss col. if a strictly correct ratio for re-insurance had been possible. He continues:

In this matter it is important to remember two things: *first*, that among these companies are those having an extended experience, and regarded as most ably managed, and *secondly*, that the cos. included are *only such as are yet alive* and active in bus. These then are the *successful* cos., they having succeeded in avoiding bankruptcy, in paying all claims upon them and in keeping their cap. full, though in many cases, by the introduction of new contributions from the stock-holders. When to the net loss of this large aggregate bus. is added the losses paid by the 68 cos. that failed in the Chicago fire, and by the 32 cos. that went down in the Boston fire, we begin to realize what are the results of the bus. of the past 20 years, but we shall be aided by remembering the fires of Troy in 1862 and of Portland in 1866, and shall more clearly realize that the entire ins. bus. of the country has been a loss to the cos. engaged in it when we recall other great fires, such as that in N.Y. in 1835 (in which more than four-fifths of the local ins. cap. was swept away), again in New York in 1845, and in Pittsburgh in 1845, in Albany in 1846, in Brooklyn in 1848, and in St. Louis in 1849, in which cos. were made bankrupt, and of the amount of their losses no State record or ins. department contains any statistics.

It is necessary to remember that the statistics derived from ins. depart. publications are those only of the cos. that survive, and that the many millions sunk with wrecked cos. never appear in them: therefore, the figures presented, while they are all the authorities can give, do not give the result of the aggregate bus., but only of the bus. of such companies as are able to keep alive. It is important also to remember, that scores of cos. have died without the aid of any great conflagration to hasten their dissolution, being carried off, not by the sudden accident of a great fire, but by an ins. marasmus, induced mainly by inadequate rates of prem., the outcome of ignorance or recklessness.

Those cos. that survive and have surplus funds and pay dividends will seem to be only those which have conducted their bus. with superior sagacity.

Following up the same line of inquiry, but from another stand-point, the Ed. of the *Ins. Reporter* in Philadelphia this year compiled a tabular statement comprising 97 "prominent American ins. cos.," showing their total prem. receipts from date of organization up to and including the last day of present year. The total prem. receipts amount to £80,672,763; the total losses paid sum up £58,718,034; leaving a difference of £31,954,724, out of which to provide for expenses of man., etc. The claims it is seen have been 60½ p.c. on the prem. receipts—leaving less than 30 p.c. for expenses, dividends, etc.

The ratio of losses of some of the larger cos. is stated to have been as follows: the *Etna*, Hartford, on 67,000,000 dol., prem. 63 p.c. *Home* of N.Y. on 34,000,000 dol., 64 p.c. *Hartford* on 27,000,000 dol., 66 p.c. *Phoenix* of N.Y. on 19,000,000 dol., 55. The *Phoenix*, Hartford, on 16,000,000, 62 p.c. The *Franklin* of Philadelphia on 16,000,000 dol., 58 p.c. The *Continental* of N.Y. on 13,000,000 dol., 56 p.c. Some of the smaller cos. than any here named show a much larger per-centage of loss.

A full statement of the position of the *French* fire ins. cos. at this date will be found under FRANCE, sub-heading *Fire*.

1875.—The following is a return of the London fires by way of continuation to the T. given under date 1865:

Year.	Total No. of Calls.	ALARMS.			FIRES.		
		False.	Chimney.	Total.	Total No. of Fires.	Seriously damaged.	Slightly damaged.
1866	1532	.....	.....	.....	1338	326	1012
1867	1591	111	83	194	1397	245	1152
1868	1858	100	90	190	1668	235	1433
1869	1784	120	92	212	1572	199	1373
1870	2246	133	109	242	1946	276	1670
1871	2046	.....	.....	204	1842	207	1635
1872	1671	104	73	177	1494	120	1374
1873	1703	83	72	155	1548	166	1382
1874	1750	89	88	177	1573	154	1419
1875	1668	90	49	139	1529	163	1366

This last T. presents several points for remark. While for the preceding 33 years, 1833-65, the fires of Lond. had shown a steady progressive increase, governed apparently by the increase of the number of houses, this T. shows some remarkable fluctuations. Thus in 1868 the fires show an increase of 267 over those of the preceding year. In 1869 they fall back to something like the normal ratio of increase. But in 1870 there is again a serious jump, the calls of that year being no less than 462 more than those of the preceding year. Since then they have shown considerable signs of decrease: the calls for 1875 being no less than 578, or nearly 25 p.c. below those of 1870. Captain Shaw in his Ann. Rep. to the Metropolitan Board of Works refers to the fluctuations, but does not explain them. A careful survey of the figures seems to indicate that the "false alarms" and "chimney" calls are less numerous since 1870. Is not this to be traced either to the introduction of the electric telegraph as the means of call, or to the change of the system in paying for calls, since the discovery of the "Anthony frauds" in 1871?

There is another aspect of the case which is really encouraging: for it shows the progressive efficiency of the Fire Brigade. This is the decreasing per-centage of serious as against slight fires, during the period embraced in the last T. Here are the per-centages, as presented by Captain Shaw:

Years.	Per-centages.		Total.	Years.	Per-centages.		Total.
	Serious.	Slight.			Serious.	Slight.	
1866	25	75	100	1871	11	89	100
1867	18	82	100	1872	8	92	100
1868	14	86	100	1873	11	89	100
1869	13	87	100	1874	10	90	100
1870	14	86	100	1875	11	89	100

In 1866 there was founded that important asso. the *London Salvage Corps*. It is supported by contributions from the fire offices transacting bus. in Lond.; and that it has been of essential service in regard to its peculiar functions may be gathered from the annexed returns of its first 10 years' operations:

Year.	No. of Fires attended by Met. Fire Brigade.	Attendance of Lond. Salvage Corps.	Of which services were rendered at
1866	1338	530	294
1867	1397	996	327
1868	1668	1374	525
1869	1572	1420	692
1870	1946	1660	803
1871	1842	1659	746
1872	1494	1384	486
1873	1548	1343	564
1874	1573	1328	405
1875	1529	1221	486

In "White's" most useful *Register* for 1876 is given the following:

Summary of Fire Revenue Account of 30 Cos. transacting Fire in conjunction with Life Ins.

INCOME.	REPORTED IN				
	1871	1872	1873	1874	1875
Premiums, after deduction of Re-assurances Interest (approximated) and other Receipts	£ 3,833,906	£ 4,589,877	£ 5,425,798	£ 5,801,576	£ 5,803,745
	231,808	232,687	210,981	222,427	265,923
	4,065,714	4,822,564	5,636,779	6,024,003	6,069,668
EXPENDITURE.					
Losses, after deduction of Re-assurances.....	2,233,592	3,413,740	3,798,487	2,980,855	3,051,922
Management and other Expenses	961,004	1,147,640	1,299,501	1,405,714	1,541,048
	3,194,596	4,561,380	5,097,988	4,386,569	4,592,970
Sum apportioned as Dividend to Shareholders, or transferred to Profit and Loss Account	871,118	261,184	538,791	1,637,434	1,476,698

Out of 37 fire cos. unconnected with life or other ins. bus. we have the returns of 7 only, including several of the best; but excluding others of the best who do not yet pub. their accounts.

Fire Ins. Abstract of Revenue Account as reported in 1875.

NAME.	INCOME.		EXPENDITURE.	
	Premiums.	Interest and other Receipts.	Losses.	Management and other Expenses.
Belfast	£18,696	£1,655	£11,280	£6,517
Essex and Suffolk Equitable	18,365	2,292	10,663	7,023
Great Britain	22,015	646	13,034	7,353
Kent	48,491	10,773	22,237	11,232
Law Fire	71,359	8,394	27,391	23,100
Manchester	146,810	5,150	88,162	34,694
Staffordshire	66,398	736	42,409	18,110
	392,134	29,646	215,176	108,029
		392,134	.....	215,176
Total Income & Expenditure	.....	421,780	.....	323,205
Excess of Inc. over Expend.	.....	.....	.....	98,575

The per-centage of claims on prems. in the *Royal Ins. Co.* was more favourable this year than it had been during 25 years. The words of the Chairman at the ann. gen. meeting in 1876 on this point do not cover the entire period named, but extend over half of it: "The ratio of loss during the past year is about 48 p.c. . . . If we refer to the past 8 years, we shall find that the average will be for this period 59 p.c.; and if we go back a further 4 years, making 12, we shall find that the average of our losses were at that period more than 63 p.c."

Herr Ludwig Jung, Director of the Munich Fire Department, and of the Bavarian Firemen's Asso., pub. this year a work on *Protection of Property against Fire*, wherein he gives (*inter alia*) the following important statistics: During the 25 years from 1843 to 1868, no less than 4000 insured buildings were destroyed by fire in Bavaria alone, exclusive of the Palatinate. During the 50 years from 1821 to 1871 the Bavarian Co. for the Ins. of Buildings against Fire paid 61 million gulden for losses, and the whole of this large sum was supplied by the prems. levied on house owners. During the years from 1870 to 1872, inclusive, 34 million thalers were paid by the ins. cos. in Prussia, and 11 million gulden are paid ann., upon the average, by the 66 cos. of the German Empire which insure upon real property.

We derive from an official source the following statement of the fires which took place during the year 1875 in the different provinces and grand duchies of the *Russian Empire*. The whole number of fires is stated to have been 25,976, of which 900 are ascribed to the act of God, 3609 to criminal causes, and 6836 to negligence; in the 14,631 other cases the causes could not be correctly ascertained. In 3543 cases the amount of the losses was not determined; in the 22,433 cases remaining the value of the property destroyed was estimated at 64,096,896 roubles [over 8 millions stg.]. The government in which the number of fires was the largest is that of Kalouga, in which the number was 1038. (See 1858.)

The *Ins. Journal* of Hartford, Conn., pub. in Feb. 1876, the returns of the prem. income and losses of 72 N. Board Fire Cos. and of 27 Non-Board Cos. for the years 1874 and 1875 (including among the former the Brit. offices trading in the U.S.). But as many of the U.S. cos. transact marine and transport ins., the figures are no exact guide as to the fire experience. However, they are valuable notwithstanding.

1874.—The 72 Board Cos. had a prem. income of £8,909,682; they paid in claims same year £4,149,950; sum insured £850,398,777. The 27 Non-Board Cos. had in 1874 a prem. income of £1,599,920; they paid in claims £815,144; sum insured £154,187,969.

1875.—The 72 Board Cos. had a prem. income of £8,645,318; they paid in claims same year £4,383,343; sum insured £833,919,577. The 27 Non-Board Cos. had in 1875 a prem. income of £1,608,101; they paid in claims £846,034; sum insured £155,938,303.

It also gave the per-centage of the risks written which were lost, and the rate received by the aggregate cos. embraced in its list:

	Board Companies.		Non-Board Companies.	
	1874.	1875.	1874.	1875.
Losses to Premiums	46.57	50.70	50.94	52.80
Losses to risks written .....	.48	.52	.52	.54
Premiums to risks written	1.04	1.03	1.03	1.04

The Ed. remarked by way of necessary explanation :

In this list of Board cos. will be found some that are not now members of the Board, but their bus. has been mainly attained during their connexion with the Board. The result would not be materially different if they were left out entirely. The fact that the per-centage of prem. to risks written is so nearly the same in both classes of cos. is not conclusive proof that both are writing the same classes of hazards at the same or nearly the same rates. But as the rates of non-board cos. are understood generally to be below those of the Board, it is an indication that they are taking a larger proportion of the more hazardous bus., and the per-centage of loss to risks written would, if the observations were sufficiently extensive, indicate the measure of that extra hazard, as it does indicate the fact of its existence.

Mr. Geo. T. Hope, the Pres. of *Continental Fire*, U.S. [see 1874], in his Address before the Ins. Convention this year, drew attention to the disproportion of loss sustained by the U.S. from fire as compared with other civilized nations. He said :

The average loss by fires in this country is 60 p.c. of the prem. The same average will apply to Gt. Brit., France and Germany,—the only difference being less than 1 p.c. But what do we charge for prem. as compared with them? According to the writer in the *Bulletin*, our charges are eight times as great as theirs; that is perhaps excessive, but, as a fair medium, we will take six times. What is the result? Our net earned wealth, as compared with other civilized nations, should burn up six times as much as other civilized nations. While we have an abundance of soil and fresh acres, we may be able to endure it; but we are growing poor comparatively, and by-and-by as we become crowded, unless we can avert it, we shall become poor as a nation to a certain degree, on account of these excessive losses. It should be the bus. of ins. cos., by means of scheduling and other devices, to endeavour to prevent this absurd and disproportionate loss. There's much you can do by fostering anything that tends to make ins. substantial, and by urging better building laws; but there are directions in which it is needed that you should understand and take a more decided ground.

He traced these disastrous results in the main to fires caused wilfully, or by such gross neglect of precautions as to amount to wilfulness. This "political economy" aspect of losses by fire is worthy of further consideration.

A Committee of the National Board of Fire Underwriters presented to that body the following statement of the receipts and expenditures of the aggregate of the Fire Ins. Asso. trading in the several States named during 1875, for the purpose of showing the effect of *taxation* upon the bus. We present the T. as we find it:

STATE.	Gross Prem. received in 1875.	Losses incurred in 1875.	Estimated Expenses.	Nominal Profit.	Per ct. of Tax to Nominal Profit.
Iowa	1,361,202	528,124	408,360	424,718	8 p.c.
Connecticut	1,084,351	735,890	325,305	23,156	93 "
Michigan	2,522,605	1,371,034	756,782	394,789	19 "
Pennsylvania	3,680,111	2,283,713	1,104,033	292,365	38 "
New York	8,516,431	4,838,842	2,554,929	1,122,660	15 "
Kentucky	995,457	365,691	298,638	331,128	8 "
Wisconsin	2,110,034	1,877,111	633,010	{ Nominal loss \$ 300,000 Taxes in addition 75,000	8 p.c.
Massachusetts	7,232,486	3,222,493	2,169,745	1,840,248	
Total	27,502,677	15,222,898	8,250,802	4,429,064	

For the purpose of making up this account the expenses were assumed at 30 p.c. The *per-centage tax to nominal profit over all the above States averages 15 p.c.* We regret that so enlightened a people should commit so grave a fiscal blunder as that of *taxing the more prudent of themselves!*

From other sources we obtain the following particulars regarding the fire bus. of other States during 1875. We do not add any charge for management :

Kansas.—Prem. received £61,000; losses £18,500; ratio, 30·43 p.c.

Michigan.—The following is a retrospect of the fire ins. bus. in this State for the six years 1870-75, showing prem. received and losses paid and incurred :

Year.	Prem. received.	Losses paid.	Losses incurred.
	dols.	dols.	dols.
1870	1,613,241 53	978,589 08	986,049 68
1871	1,647,507 24	642,946 92	1,033,941 54
1872	2,208,735 00	1,266,717 96	1,335,707 91
1873	2,505,333 23	1,336,806 47	1,436,461 81
1874	2,570,687 63	1,225,872 68	1,273,252 66
1875	2,522,605 31	1,350,148 05	1,371,034 69
Total ...	13,068,109 94	7,100,880 96	7,439,158 29

Missouri.—1875. Prem. £460,000; losses, £183,120; ratio, 39·89 p.c.

Tennessee.—1875. £147,000; losses, £60,000; ratio, 40·52.

Ohio.—Here we have more important details. There were in this State in 1875

39 joint-stock and 19 mut. fire ins. cos. The total cap. of the joint-stock cos. was £1,091,500; their assets £1,800,730; their total liabilities, £1,288,061. There were also 123 cos. from other States transacting bus. there; and 13 foreign cos. The risks written by the joint-stock cos. during the year amounted to £27,531,042; the prems. resulting £369,378; the losses paid £163,000. The risks written by the mut. cos. were £10,087,102; the prems. £97,600; the losses £57,600. The other cos. wrote risks amounting to £40,495,698; received in prems. £545,400; and paid in losses £205,066. The aggregate risks amounted to £78,114,000; prems. received £1,012,565; losses £425,460—leaving a surplus for expenses and profit of £587,113.

It is much to be regretted that the returns of the several States are not made on uniform principles, in order that they can be readily compared and aggregated.

From the Ins. Rep. for *Pennsylvania* (pub. 1876) we learn the following details of the F. ins. bus. of that State for the years named in the returns; but here again several of the cos. write marine and transport risks,—the relative proportions are, however, shown:

1874.	1875.		Fire risks written.		Marine and Transport risks written.	
			1874.	1875.	1874.	1875.
63	56	Stock Cos. of the State ...	£	£	£	£
122	147	Stock Cos. of other States ...	49,954,112	42,426,373	14,362,684	15,446,848
14	16	Foreign Stock Cos. ...	37,334,699	40,401,371	159,193	787,024
			14,666,820	15,775,983	...	11,350
			101,955,631	138,603,727	14,521,877	16,245,222
1874.	1875.		Prems. received.		Losses paid.	
			1874.	1875.	1874.	1875.
63	56	Stock Cos. of the State ...	£	£	£	£
122	147	Stock Cos. of other States ...	860,595	712,122	339,795	350,849
14	16	Foreign Stock Cos. ...	497,186	523,522	201,180	339,807
			191,324	212,502	55,941	116,876
			1,549,105	1,448,146	596,916	807,592
Ratio of Losses paid to Prems. received.						
1874.	1875.				1874.	1875.
63	56	Stock Cos. of the State ...	...	...	39'48	49'21
122	147	Stock Cos. of other States ...	...	...	44'63	64'91
14	17	Foreign Stock Cos. ...	...	...	29'23	55'00
					38'53	55'76

The *Mutual* Cos. of the State show the following experience for the past 3 years:

YEAR.	Mean amount at risk.	Risks written.	Cash prems. and assessments.	Losses paid.	Ratio of	
					Losses to prems. and assessments.	Prems. and assessments to amount at risk.
1873	£ 84,053,531	£ 23,117,964	£ 350,099	£ 217,472	60'57	'39
1874	91,576,954	27,236,020	394,304	242,883	61'59	'43
1875	102,157,711	26,815,471	388,421	273,821	70'49	'38

The *American Exchange and Review* for March, 1876, gave the following table of number of fires, with amount of loss and amount of insurance involved, in *Philadelphia*, from 1855 to 1875, both inclusive. The table was compiled by Fire Marshal Thompson:

Year.	No. of Fires.	Loss.	Insurance.
		dols.	dols.
1855	199	221,141'00	127,294'00
1856	290	1,615,571'00	993,255'00
1857	335	562,225'00	404,038'00
1858	358	270,510'00	151,740'00
1859	363	242,000'00	197,000'00
1860	398	363,232'00	288,517'00
1861	387	345,000'00	210,000'00
1862	384	450,176'00	291,959'00
1863	332	400,264'00	239,409'00
1864	396	999,249'00	546,277'00
1865	436	1,269,499'00	809,870'00
1866	597	3,192,997'00	1,975,855'00

Year.	No. of Fires.	Loss.	Insurance.
		dols.	dols.
1867	519	719,005'00	414,009'00
1868	487	1,770,471'00	1,255,581'00
1869	598	4,212,855'00	3,015,940'00
1870	639	2,477,933'00	1,994,356'00
1871	523	1,275,143'00	3,000,000'00
1872	603	2,173,140'83	8,469,236'96
1873	893	950,602'75	5,065,097'77
1874	626	749,697'22	5,108,572'49
1875	669	1,193,970'05	6,545,789'00
	10,032	25,454,689'89	41,103,797'13

From Messrs. T. and J. Slaton's Chart we obtain a complete insight into the bus. of the "Foreign Cos." transacting fire bus. in the U.S. in 1875, of which the following is an abstract :

NAME OF COMPANY.	Net Fire Prem. Receipt in the U.S. in 1875.	Total Fire Losses Incurred in the U.S. in 1875.	Total Expenses of Management in 1875.	Profit and Loss of Business in the U.S. in 1875.	RATIOS.		
					Expenses of Management to Prem. Receipts.	Losses Incurred to Prem. Receipts.	Total Expenditure to Prem. Receipts.
	dols.	dols.	dols.	dols.	p.c.	p.c.	p.c.
British America (Toronto) ...	*276,750	*92,527	76,096	108,127	27'49	33'43	60'92
Commercial Union (London)...	767,555	332,299	202,793	232,553	26'40	43'29	69'69
Guardian Assu. Co. (London)	89,446	20,775	34,661	34,010	38'74	23'22	61'96
Hamburg, Bremen (Hamburg)	367,491	105,203	104,924	157,364	28'57	28'62	57'19
Imperial (London) ...	409,935	154,179	147,508	108,248	35'98	37'61	73'59
Lancashire (Manchester) ...	565,813	313,916	149,939	101,958	26'49	57'44	81'93
L'pool & Lond. & Globe (L'pool)	2,328,140	841,870	744,587	741,683	31'98	36'16	68'14
London Assu. Corp. (London)	379,129	102,725	126,391	150,013	33'33	27'09	60'42
N. Brit. & Mercantile (Lond.)	1,429,355	746,394	432,236	250,725	30'23	52'21	82'44
Queen (Liverpool, England) ...	662,263	461,684	256,826	243,753	26'68	47'97	74'65
Royal Canadian (Montreal) ...	*832,777	*310,482	302,545	219,750	36'32	37'28	73'60
Royal (Liverpool, England) ...	1,684,233	743,902	486,475	453,856	28'88	44'16	73'04
Scottish Commercial (Glasgow)	324,264	159,603	122,748	41,913	37'85	49'22	87'07
Western Assu. Co. (Toronto)	*391,323	*191,366	99,315	100,702	25'37	48'88	74'25
14 Companies ...	10,808,474	4,576,865	3,286,954	2,944,655	31'02	40'47	71'49

* Includes Marine and Inland ins. in the U.S. and Canada.

The following T. of the prems. received and losses paid by the several Brit. F. Offices trading in the U.S., during the period they have so traded, down to the end of 1875, will be regarded with interest. In the case of the *Royal*, although it commenced bus. in the U.S. in 1851, we have no separate returns previously to 1873. The *Liverpool, Lond. and Globe* commenced its agency in 1853, but we have no returns until 1861 :

	Yrs. Trading.	Premiums.	Losses.
Commercial Union	5	£ 565,345	£ 317,180
Guardian	4	70,993	12,606
Imperial	8	1,196,209	861,724
Lancashire	4	379,201	184,279
Liverpool, Lond. & Globe (part)	15	5,570,406	3,857,529
London Assurance Corporation	4	303,260	121,398
North British and Mutual	10	1,975,334	1,581,699
Queen	10	1,215,505	767,096
Royal (3 out of 25 years)	3	1,117,736	569,136
Scottish Commercial	3	115,689	52,104
Totals		£ 12,509,678	£ 8,325,051

The cost of man., taxes, unexpired risks, and other expenses, will have reduced the apparent surplus very materially.

The *Hamburg-Bremen* Fire in 3 years' trading received in prems. £216,702, and paid in losses £82,872.

The following details of Fire bus. in *Canada* are drawn from the 1st Report of the Ins. Supt. (Mr. J. B. Cherriman), pub. under the authority of 38 Vict. c. 20 (1875). We reduce the totals into stg. (5 dol. p. £), and change the form of the T.:

Years.	Canadian Cos.		British Cos.		American Cos.	
	Premis.	Losses.	Premis.	Losses.	Premis.	Losses.
1869	£ 100,272	£ 55,223	£ 223,802	£ 113,883	£ 33,033	£ 34,437
1870	107,320	90,682	237,079	204,872	38,956	29,412
1871	141,582	82,468	259,969	184,480	62,890	42,492
1872	159,367	102,094	299,922	217,433	66,448	52,668
1873	168,579	97,529	354,453	193,463	70,451	45,444
1874	290,756	132,494	361,894	224,023	51,809	28,716
1875	329,330	216,441	336,741	259,922	52,879	36,340
Totals	1,297,206	776,931	2,073,860	1,398,076	376,466	269,509

The total sums insured had increased during this period from £37,671,962 to £72,884,206. This increase has been mainly with the local offices, of which there were but 5 in 1869 against 11 in 1875. The sums insured by these cos. had increased from £11,868,183 to £38,056,908. There was only one additional British company. The bus. for 1875 stood as follows:

	Gross Amount of Ins.	Premis. received.	Losses Paid.
Canadian Cos.	£ 33,779,222	£ 323,731	£ 216,441
British Cos.	33,390,653	336,723	259,922
American Cos.	3,471,521	52,879	36,322
	£ 70,641,396	£ 713,333	£ 512,685

The per-centage of loss to premis. this year was 71'31 p.c. In 1869 it was 57'56; 1870, 84'77; 1871, 66'73; 1872, 72'66; 1873, 56'67; 1874, 54'68.

The bus. shown in the above returns does not represent all the fire bus. of Canada. In the province of Ontario there are many mut. asso. and other local cos., and it is believed that nine-tenths of the ins. on agricultural produce is insured by these. The number of fire cos. licensed to transact bus. in Canada at the end of 1875 was 27, viz. 11 Canadian, 13 Brit., and 3 American. Of the Canadian cos. 4, and of the American cos. 2, also transacted Marine Ins. One new licence was issued during the year, to the *Ottawa Agricultural*.

The total paid-up cap. of the Canadian Fire Cos. (some of which include marine bus.) was at the close of 1875, £475,401, representing a subscribed cap. of £2,842,164. The total assets of the cos. (excluding unpaid cap.) was £1,007,583, to protect a sum insured of £58,049,725 (being two-fifths Marine), leaving 1'75 of assets p.c. on sum insured; or including unpaid cap., 5'81 p.c. The total dividends and bonus paid to stockholders in 1875 was £31,922, being 6'86 p.c. on paid-up cap.

It would appear extremely doubtful if, after paying expenses and losses, any money has ever been made on Fire bus. in Canada. In this estimate we are taking into consideration the money sunk by the numerous cos. that have failed, or retired with a loss. When the accounts for 1876 are closed, another bad year will be revealed. The managers of the Fire Cos. there are at length trying to put the bus. on a paying footing.

The *Chronicle* of N.Y., in its number for 13 Jan. 1876, contained a most exhaustive review of the fires in the U.S. and in Canada during the year 1875. Such a return had prob. never been previously made for any country—unless indeed it be *Russia*, where an official record is kept of all fires, as certainly there ought to be in every civilized State. We can only give but an outline of the many important facts contained. The total value of the property burned on the N. American Continent during the year was £17,261,607 stg., of which £8,726,340, or rather more than one-half, was covered by ins., while the remainder of the loss fell upon the owners. We avail ourselves of the summary of the main facts, placing the money values into sterling as we proceed:

Of the total loss, £11,074,780 was caused by the burning of 3662 "specials," and on account of this the ins. cos. paid £5,610,400. *October* maintained its reputation as the most disastrous month of the year, the losses during the month being £2,590,619. The months of March and September, notorious as months of turbulent winds, show the least loss. "The tax we have paid to the fire fiend amounts on the average to about £2 p.a. for each productive life in the country. And of this tax 75 p.c., at a moderate computation, was inflicted by causes entirely preventible—chiefly by carelessness and incendiarism."

Turning to the "specials," we find that first in the number come *Hotels*, of which no less than 337—nearly one per day—were burned during the year. And these burnings were distributed pretty evenly throughout the year. Hotels burn in all seasons—in season and out of season—and in all latitudes and longitudes. Next on the list come *Saw-mills*, of which 216 burned—the greater "mortality" being in the summer months, when many

of them are idle. *Liquor stores* make a brave effort to keep up with hotels and saw-mills in flammability, but only 168 of them succeeded in getting burned. *Drug stores*—which every druggist will tell you *never* burn—come in a good fourth, with 133 burnings. *Restaurants* are close after them, with 126; and 119 *Livery stables* were converted into chariots of fire. Then come 107 losses on *Furniture factories*, 96 on *Machine shops*, 78 on *Flouring-mills*, 83 on *Planing-mills*, 78 on *Carpenter shops*, and 73 on *Blacksmith shops*. *Churches* and *Lumber-yards* and *Public halls* burn very evenly—75 churches, 74 lumber-yards, and 72 public halls. *Tanneries* and *Woollen mills*, *Newspaper offices* and *Printing offices* keep close together in the race for destruction—51 of each of the first three burning, and 48 printing offices. *Cotton-mills*, *Cooper shops*, and *Carriage factories* make about the same contributions to the total number of losses, and *Wood-working* establishments of every kind do their utmost to swell the aggregate. The Ed. says:

But this T. must not be mistaken for a guide by which the relative inflammability of different hazards can be computed. Because it records the burning of 36 *Breweries* and but one *Celluloid factory*, it would be absurd to infer that breweries were 36 times as hazardous as celluloid works. There are about 3600 breweries in the country. There was but one manufactory of celluloid, and that burned.

In a later number of the same pub. (17 Feb. 1876), the Ed., returning to the subject, said:

The statistics of the losses by fire in 1875 are worth a little study, for they suggest one source of bus. depression. Eighty-six million dollars burned, wiped out of existence in a year not remarkable for large conflagrations, is a fact that suggests the vast amount of labour that is being expended to replace this ann. drain upon the property of the country. In this very ordinary year the losses returned amount to more than five-sixths of the interest on the national debt, and beyond doubt if the actual losses could be ascertained the amount would exceed the national interest charge. Of course the sufferers by these fires had returned to them about half their losses through the ins. cos., but the loss out of the actual property of the country was not altered by the shifting of the burden. A million dollars burned is gone, and it matters not whether the loss falls upon the owner or upon an association that has undertaken to indemnify him—to stand between him and utter ruin.

This, as we have before said, is the National aspect of the case.

Of the preceding 17 millions odd of losses by fire in 1875, £15,620,457 occurred in the U.S., and £1,645,150 in Canada. The Ed. of the *Exchange and Review*, remarking hereon, offers some valuable suggestions regarding the fire underwriting features of the two countries:

Thus with less than one-tenth of pop. Canada has more than one-tenth of fire loss. Prominent attention is given to the special risks, losses on which aggregate 55,373,900 dols., U.S. 50,348,590 dols.; Canada, 5,025,400 dols. Here Canada sustains a less proportion of loss—the industrial development of the Dominion not being equal to that of the U.S.; but, in number of specials burned, the relative ratio of Canada is the higher, being over one-eighth of the number burned in the U.S. United States specials burned, 3203—average loss, 1572 dols.; Canada, 450—average loss, 1094 dols. In the U.S. ins. cos. lost on specials, 25,505,540 dols. or 50.6 p.c. of the total reported loss; in Canada, 2,547,350 dols. or 50.7 p.c.—showing, with the character of adjustments, a remarkable equality in estimate of fire hazard, and of proportion of insurance to property value.

Specials are 50 p.c. of the total losses recorded for the U.S., and 30 p.c. of the Canada losses. Fires occurred in the U.S. in 331 kinds of specially hazardous subjects, and 80 kinds in Canada; yet a butcher's shop, a cavalry barrack, a glove factory, a pail factory, a spool factory, and two tub factories took fire in Canada, and not one of them in the U.S. There are points of conformity and contrasts between the respective risks of the two countries, which the intelligent reader will find suggestive, but we have not time to go over.

Then remarking upon the returns generally, he says:

The most striking point in the tabulation is the testimony which it bears to the fire danger arising from collections of people. Hotels are at the head of the list with 337 losses; churches, 75; public halls, 72; public school buildings, 43; college buildings, 8; club-houses, 4. These are risks of no high grade of physical hazard, yet when people are otherwise gathered together, that is, for industrial or business purposes, the combustibility of their surroundings does not appear to be enhanced in anything of equal degree; yet to this, meat markets (33) offer an apparent exception. Taking an advance of the non-personal hazard, we note opera-houses, 9; theatres, 3; restaurants, 126; which may be an indication that the opera-house is the most ignitable of the three. With grocery stores so numerous, and only three burning, in contrast with the four of the comparatively few club-houses, the principle of the personal hazard of collective people receives strong emphasis; but then the club-house may be essentially a restaurant risk. People keep away from drug stores as long as they can, but the burning of 133 testifies to their intrinsic fire liability. Cotton-gins, 10, we do not think fully reported.

It appears that farm buildings and farming stock ins., although much sought after in the U.S., is, at least in many districts, of by no means a profitable character. The *Ins. Times* of N.Y. gives the returns of 9 fire offices (7 of them N.Y. cos.) doing this class of bus. in Michigan in 1875. The aggregate prems. of the year were £65,609; the losses £44,419. But adding expenses of management, 2 cos. only made a profit; the losses and expenses in one case reached over 170 p.c. of the prems. Over the entire 9 offices the losses and expenses averaged 120 p.c. of the prem. receipts. The year was not regarded as an exceptionally bad one.

The Ed. of the *Evening Mail* of N.Y. gave a list of the great fires in the N. American Continent in 1875.

The Hon. Julius L. Clark, ex-Ins. Commissioner in Massachusetts, makes the national loss from fire far greater than any of the figures we have yet quoted. He says that the total ann. losses by fires throughout the U.S., computed from statistics carefully collated, week by week, exceed £98,600 per day, or nearly £36,000,000 p.a., of which amount

not over £20,000,000, it is estimated, is covered by available ins. He has prob. included the large fires of 1871 and 1872.

It was estimated by Mr. J. A. Coleman, C.E. (U.S.A.), in a paper read before the So. of Arts, Feb. 1875, that in Gt. Brit. and the U.S. only the ann. destruction of property by fire must be over £50,000,000—"or something like 10s. for every man, woman and child in both countries." He does not state his authority for the estimate.

The Rep. of the Committee of the N. Board on Incendiarism and Arson, presented at the meeting in 1876, showed that during the past year at least 35 p.c. of the number of fires were caused by incendiaries, while fully 55 p.c. of the property destroyed were lost by the same cause. The Report recommended the offering of rewards for the arrest and conviction of incendiaries. Defective flues and foul chimneys cause daily fires. The Rep. of the Committee on Fire Department, Fire Patrol, and Water Supply, recommended the estab. of fire patrols in every city, and that they should be partly sustained and supported by the cities where they were located. *New York* city had not got sufficient water supply for its protection in case of emergency. *Chicago* was credited with having the best fire department.

1876.—Captain Shaw, in his evidence before the Select Parl. Committee on Fires, this year, estimated the insurable value of property in *Lond.* at £1,440,000,000 stg. Ten years ago it was £900,000,000. He estimates that there are 600,000 buildings under the guardianship of the Metropolitan Fire Brigade. He may well demand further assistance.

We shall have occasion to make a further review of the evidence laid before this Committee, on the completion of its labours. This we shall prob. do under titles of LONDON and METROPOLITAN F. BRIGADE. The following results from a return laid before this Committee may be given here, as they differ in some respects from those given on pp. 141-2 of this Vol. For the last ten years the month in which the largest number of fires occurred in *Lond.* was *July*, and next to it in the return stands *August*, and then *December*. The days on which the largest number of fires happened were *Saturday* and *Wednesday*. The hours at which the largest number of fires broke out were from 7 P.M. to 11 P.M.

The following are the details of the fires in *Manchester* for the year ending 29th Sept. 1876: Fires attended by the Brigade 328. Estimated value of property (buildings and stock) at risk £2,771,385. Of this amount £118,178, or 4·2 p.c. was destroyed. Compared with the preceding year there was an increase of 36 fires, of £668,934 in amount at risk, and of £55,480 in the amount destroyed. The estimated value of the property saved (*i.e.* not destroyed) was £2,653,207, or 95·7 p.c. The ann. average for 10 years of the property jeopardized by fires, and not destroyed, was £1,630,998, or 96·2 p.c. of the amount at risk. Nine lives were lost, and 15 fires were attended beyond the limits of the city during the year.

The Ann. Rep. of the Committee on Fire Patrol of the N.Y. Board of Fire Underwriters furnishes the following important details regarding the fires in that city for 17 years, ranging (with an intermission of 5 years) from 1855 to 1876, showing the aggregate ins. on the buildings and property burned, and the amount of actual loss to the ins. offices during that period:

Years.	BUILDINGS ONLY.			CONTENTS ONLY.			BUILDINGS AND CONTENTS.		
	Ins.	Loss.	Per-centage.	Ins.	Loss.	Per-centage.	Ins.	Loss.	Per-centage.
	dol.	dol.		dol.	dol.		dol.	dol.	
1855	955,864	247,167	25·85	1,743,620	640,272	36·72	2,699,484	887,439	32·87
1856	949,800	134,633	14·17	1,805,500	429,273	23·77	2,755,300	563,906	20·46
1857	1,400,238	346,037	24·71	3,609,585	1,062,290	29·42	5,009,823	1,408,327	28·11
1858	970,362	133,943	13·80	2,324,275	552,312	23·76	3,294,637	686,255	20·82
1859	1,040,275	187,757	18·04	1,313,325	269,866	20·54	2,353,600	457,623	19·44
1860	1,691,300	480,458	28·40	2,918,630	1,096,105	37·55	4,609,930	1,576,563	34·19
1861	1,695,575	351,933	20·75	4,496,710	1,042,756	23·18	6,192,285	1,394,689	22·52
1862	1,562,530	341,248	21·83	3,553,031	879,191	24·74	5,115,501	1,220,439	23·85
1863	1,939,401	368,984	19·02	2,701,290	876,227	32·43	4,640,751	1,245,211	26·83
1864	2,311,845	454,299	19·65	5,782,955	1,659,155	28·69	8,094,800	2,113,454	26·10
1865	2,415,380	650,551	26·93	9,481,122	3,073,447	32·41	11,896,502	4,323,998	36·34
1866	2,540,700	837,668	32·96	9,790,087	4,968,924	50·75	12,230,787	5,806,592	47·09
1872	4,589,551	363,838	7·92	6,483,204	1,273,486	19·64	11,072,755	1,637,324	14·58
1873	5,502,914	720,777	13·09	8,806,119	2,735,279	30·74	14,309,034	3,456,057	24·14
1874	3,351,730	300,466	8·96	5,849,859	1,200,041	20·51	9,201,589	1,500,508	16·30
1875	4,319,316	379,132	8·77	8,494,858	1,592,809	18·75	12,814,175	1,971,952	15·38
1876	5,375,311	506,587	9·42	7,368,035	2,659,678	36·09	12,743,346	3,166,266	24·84
	42,612,154	6,805,501	15·97	86,612,207	26,611,113	30·72	129,224,361	33,416,615	25·85

[We have left out the cent cols., which will cause a slight variation in casting the totals.]

The following statistics in regard to the fires in that city for the period of 22 years we draw from the same source, and present for the purposes of comparison with the statistics of *Lond.* given under date 1865. It will be seen that the arrangement of the T. in regard to frequency of occurrence.

Fires and Alarms in the City of New York (22 Years) 1st May, 1854, to 30th April, 1876.

Years (Ending April 30.)		Months.		Days of the Week.		Days of the Month.	
1875	1093	July	1829	Thursday	2612	4	824
1873	1017	January	1679	Wednesday	2575	5	624
1867	1012	December	1678	Tuesday	2555	26	615
1876	962	March	1608	Monday	2524	14	614
1872	922	February	1483	Saturday	2465	1	611
1871	916	April	1443	Sunday	2409	25	598
1869	914	November	1418	Friday	2370	20	594
1868	912	June	1389			3	590
1870	867	May	1294			28	589
1874	841	October	1275			2	589
1861	827	August	1208			8	580
1860	765	September	1206			10	576
1866	757					27	575
1864	742					13	571
1865	705					29	566
1862	700					19	559
1863	700					23	556
1857	667					21	553
1858	627					15	551
1859	624					9	550
1856	585					24	543
1855	355					6	536
						18	534
						7	533
						16	531
						22	528
						11	523
						30	523
						17	520
						12	514
						31	340
Av. 795	17,510	Average, 66	17,510	Average, 15	17,510	Av. 2	17,510

The following observations arise out of this summary:—The fires have averaged 795 p.a., or 2 p. day over the period. *July* stands first (as in Lond.) with regard to total number of alarms and fires (here they are not separated as with us). *Jan.* stands next, and then *Dec.*, which is in Lond. the most serious month. In N.Y. *Thursday* is the most fatal day for fires; with us *Tuesday*. *Friday*, as with us, has the fewest.

The *hours of the day* most subject to fires in N.Y., as observed over a period of 8 years—we do not give the T.—are from 7 to 8, 8 to 9, and 9 to 10 P.M., the first-named hour holding the first place; while with us 10 P.M. is the most frequent hour. The cols. representing the “days of the month” on which most fires occur is a new arrangement which we have not yet adopted. It presents some new considerations. If mercantile bills should fall payable on the 4th of the month (as with us)—a point upon which we are not informed—the coincidence must be regarded as very remarkable!

It seems clear that the preceding statistics do not cover the whole fires of N.Y. They prob. only apply to properties insured. The talented Ed. of the *Evening Mail*—who is familiar with the best sources of information—gives us the following returns of the total fires of the last 10 years, and the amount of loss consequent thereon:

Year.	No. of Fires.	Loss.	Year.	No. of Fires.	Loss.
		dol.			dol.
1866	796	6,428,000	1871	1258	2,127,256
1867	873	5,711,000	1872	1681	4,409,000
1868	740	4,342,000	1873	1398	2,648,795
1869	850	2,626,393	1874	1411	1,328,844
1870	964	2,120,212	1875	1373	2,340,600

But the editors of the *Chronicle Ins. Journ.* (who have paid especial attention to the statistics of fires) put the fires for 1875 still higher. They say (Jan. 1876): “N.Y. city was visited by 1418 fires during the year 1875, the aggregate loss by which was 2,472,534 dol. The uninsured loss was 671,482 dol. The loss on buildings was 512,947 dol.; on stock, 1,959,587 dol. The average loss per fire was 1,793.39 dol.”

And they support their statement by giving from the records of the Fire Department the following summary of the causes of the fires, footing up to their number :

Acid igniting	2	Incendiary and supposed incendiary	40
Alcohol igniting	1	Kerosene lamp explosions	76
Accidental	20	Liquor boiling over on stove	1
Benzine vapour igniting	1	Malicious mischief	28
Back draft of chimney	3	Glue boiling over	1
Back draft of furnace	2	Overheated ovens, boilers, furnaces, etc.	66
Bursting of water back of range	5	Overheated journals	3
Carelessness	414	Phosphorus igniting	4
Chemicals boiling on furnace	2	Rubbish igniting from steam pipe	1
Children playing with matches	77	Rats gnawing matches	2
Cinders from grates	1	Soot igniting and setting fire to fireboard	2
Clothing taking fire from stove	5	Sparks from stoves, stovepipes, forges, chimneys, and furnaces	65
Candles and lamps setting fire to Christmas trees	4	Stoves upsetting	4
Defective arrangement of furnaces, etc.	4	Sugar boiling over on furnace	2
Defective flues, ranges, heaters, and steam pipes	66	Spontaneous combustion of oily sawdust, waste, etc.	40
Explosion of liquid gas	1	Spontaneous combustion of chemicals	1
Escaped gas from meter and pipes igniting	38	Slaking of lime	5
Foul chimneys	172	Shavings taking fire from furnace	1
Friction of machinery	7	Vapour of kerosene oil igniting	3
Fireworks	59	Vagrants setting fire to straw, etc., in empty houses	2
Fat falling in fire	11	Varnish boiling over	7
Fire pot upsetting	1	Unknown causes	35
Gas explosions	2	Wood dropping into furnace	2
Gas lights improperly exposed	55	Tar boiling over	7
Grease dropping in fire	4	Sparks from previous fire	1
Hot coals, ashes, etc.	18		
Insecure stovepipes	2		
Heat from boilers and furnaces	2		
		Total	1418

The discrepancies indicated detract much from the value of the returns in a statistical point of view ; and we naturally ask, What is the cause? and where is the remedy?

A Rep. prepared for the National Board by the Committee on the Origin of Fires (1876) contains the more prominent causes of fire in a number of the leading cities of the U.S. aggregated under a few heads. The reports from which these figures are drawn did not cover precisely the same periods, "some of these not even covering 12 months":

	Defects.	Matches.	Spontaneous.	Accidental.	Carelessness.	Miscellaneous.	Unknown.	Incendiary and Supposed Incendiary.	Petroleum in all its forms.	Total.
St. Louis	46	2	5	2	19	43	30	32	17	196
Chicago	65	8	8	21	70	28	51	72	9	332
Baltimore	71	26	1	8	46	66	20	8	62	308
Boston	103	31	13	20	28	107	64	92	35	593
New York	345	79	41	281	484	36	32	42	78	1418
Brooklyn	91	33	6	35	38	39	83	24	36	385
Philadelphia	142	32	23	146	88	70	77	20	67	674
Hartford	5	3	3	4	4	4	4	9	4	40
Total	868	214	100	517	777	393	461	308	308	3946

The Committee remark hereon :

It will be seen that 777 fires are attributed to *carelessness*; which does not include carelessness with matches or petroleum. This subject it is useless to discuss, because this organization is powerless to effect any reform in it. It is, however, well worth bearing in mind in its relations to the daily use of things dangerous in themselves. A stove, or a lamp, or a gas bracket, which with proper care might be entirely safe, may be very unsafe among a people with whom carelessness is so prevalent. The *accidental* fires are 517, and the *miscellaneous* are 393. Among them are included many, such as fires from clothing and wood drying too near stoves and boilers, fires from gas brackets being swung back lighted against woodwork, and the like, which seemingly might well have been ascribed to carelessness. Very many of them by use of intelligent caution might have been prevented.

In an address before the Michigan State Firemen's Asso., by Mr. Fred. H. Seymour, Sec. of Board of Fire Commissioners, Detroit, some estimates of great interest were presented. The author, referring we presume more particularly to the U.S., said: "Statistics show that fires are increasing both in numbers and destructiveness, *far more rapidly proportionately than the increase of wealth and production.*" He says it is computed (but does not say on what authority, but we suspect he is not far wide of the mark), that *from an ann. fire loss in 1868 of 35 million dol., the ann. aggregate—leaving out such exceptional fires as Chicago and Boston, "if they may be called exceptional"—has now reached 100 million dol.;* and he proceeds to offer the following reflections thereon:

This loss is the irremedial loss of human product and industry. It is the conversion of human blood, brawn and muscle, necessary to create 100,000,000 dol. of value, into ashes and smoke. Assuming

the labour that produced this value to be worth 3 dols. p. day, this loss is the loss of more than the combined labours of 100,000 men for one entire year.

Then, too, it must be remembered that this is *surplus production*. It has been accumulated by producers after earning livelihoods for themselves and families and paying their share of the cost of government, and their proportion of the burdens of society. It would require then the labour of 100,000 men for 20 years to replace by surplus production this annual loss. It is not only so much wealth subtracted from the resources of the country, but it is the loss of the productive power of so much capital.

This annual loss is a direct tax on every department of trade and industry, a tax which enhances the cost of every necessity, and lessens the purchasing power of every day's labour. We buy nothing of which this is not a part. We possess nothing of which this is not a subtracting influence.

This computation does not take into consideration the loss of life directly and indirectly entailed by this loss of money, through the prevalent disregard exhibited in constructing modes of egress from public buildings, hotels, factories and tenements. Neither does it include a mention of the annihilation of the ranks of those gallant men whose duty it is to battle fire, and whose dangerous duty is made a greater danger by the weak wall and faulty construction of buildings that topple over and destroy those who would save them.

This is at once a lofty and just view of the question. It elevates the subject from the appearance of merely representing the selfish views of fire underwriters into the higher domain of Political Economy, to which in truth we think the whole Finance of Ins. as of right belongs. He looks round for some remedy, and says :

It is a matter of experience that the effect of legislation, providing authority and systematic means for investigation into the causes of fires, would detect many criminals who otherwise would escape, and deter others from becoming criminals who otherwise might, not having the fear of the law and detection to withhold them.

As to those fires occasioned by carelessness, it is demonstrable that a system of laws regulating the construction of buildings and conferring discretionary powers upon those deputed to carry out their provisions, to supervise buildings, to inspect premises, chimneys, to regulate the storage of inflammable goods ; to compel the exercise of care and the remedy of existing dangers ; that such a system would decrease the loss by fire in this State one-half.

The same may be said of most of the States of the American Union ; and, in differing degrees, of many of the countries of Europe.

The question of the number of fires occurring annually in the U.S. is again receiving attention : this mainly in consequence of the statement of a well-known adjuster of fire losses that there were "100 fires daily in the U.S." The learned Ed. of the *Exchange and Review* said that his own investigations led him to believe that "1 fire per hour" was nearer the mark ; but he adds :

No full daily rep. of fire losses has ever been made, and the aggregate for one year has never been told. The number of 100 p. day is 36,500 p. year—startling figures to many ; and yet the statistics of 1875 give nearly 4000 fires in eight cities containing about one-twelfth of the pop. of the country,—and what are the ratios of town and country fires as to city fires per 1000 of pop. ? Taking the generally received approximate amount of 100,000,000 dols. as measuring the full fire loss of the country in 1875, Mr. Bennett's 36,500 fires make a loss per fire of 2739 dols. In the *Chronicle's* report of 1910 fires occurring in the U.S. in the first quarter of 1876, the average loss per fire is 9841 dols.—an exceptionally high average, undoubtedly ; but is not Mr. Bennett's average too low, if there be included only those ignitions which, in a positive sense, cause loss ? Whether the exact figures be ever reached, the eternal volcano ever burns—or at least with briefest interruptions. We cannot say as yet that fire rages throughout the land at every instant of time, yet the calculation is working towards such solution. At every turn of the swiftest wheels of revolving life, fate to us cries Fire ! Fire !!

Mr. J. B. Bennett, a well-known fire underwriter (formerly of Cincinnati), read an Address before the Fire Underwriters of the North-West, at Chicago : *Fighting Fire Fifty Years : no Golden Wedding*, in which occurs the following passage :

The destruction of property by fire in the U.S. is calculated to be 100,000,000 dol. p.a. The entire gold product of the globe, during the last twenty-seven years, ann. only averaged 100,000,000 dol. In 1874 and 1875 it was under that sum. Since 1850 2,000,000,000 dol. of the wealth of this nation has been annihilated by fire—a sum sufficient to pay or carry the national debt—besides accumulating this wealth at home without any estimate being made for its compounding power, or calculating for credit equal to every dollar of capital not burnt up. Such is the past. What of the future ? for the more wealth the more ins.

The estimate of the losses by fire in the U.S. being 20 millions stg. p.a. is in accordance with that of Mr. F. H. Seymour, already quoted.

The returns of the Fire Department of *San Francisco* for the year ending 30 June, 1876, present the following statistics : number of calls, 313 ; number of buildings burned, 251 ; the loss estimated at £128,098. The aggregate ins. thereon £318,513. The cost of the Fire Department is about £50,000 p.a.

The proportion of "Fire Alarms" to pop. in several American cities is stated to be as follows : In New York, 1 to each 2093 inhabitants ; in *San Francisco*, 1 to every 2000 ; in *Boston*, *Cincinnati* and *St. Louis*, about 1 to every 1100 ; in *Chicago*, as high as 1 to every 780 inhabitants.

The "Centennial Ins. Card," pub. by the *Exchange and Review*, Philadelphia, 1876, states that in the U.S. the capacity to burn and the liability to take fire have increased yearly, "and fires have increased by decades, at least, throughout the past century. According to such incomplete data as are at hand, the following appears to be an approximation to the fire loss for each 100 dollars of combustible values (both insured and uninsured) in the given ten year periods :"

Period.	Fire Loss per \$100.	Period.	Fire Loss per \$100.
1776-1785	12 Cents.	1826-1835	40 " Cents.
1786-1795	14 "	1836-1845	50 "
1796-1805	20 "	1846-1855	60 "
1806-1815	27 "	1856-1865	75 "
1816-1825	34 "	1866-1875	80† "

* Excluding New York fire of December 16, 1835.

† Excluding Chicago fire of Oct. 8 and 9, 1871, and Boston fire of November 9 and 10, 1872. These fires bring the loss ratio of the decade up to about 112 dol.

The Ed. says: "This growth of loss ratio has been in connexion with the fact, that the fire jeopardy of the detached dwelling-house has been least increased. The individual risk, however, grows more complex, and in the body of risks there are continuous additions to the degrees of hazard; the scale of fire danger being now one of great extent, with its degrees approximately marked by the underwriter."

The Statistical Committee of the National Board of Fire Underwriters, N.Y., presented through Mr. H. H. Hall, its Chairman, a Special Rep. on *Losses by Fire caused by Fireworks and Firecrackers on 3rd and 4th July, 1876*. The information it contained had been derived from 347 joint-stock ins. cos., 149 mutuals (mostly local), 849 chief engineers, and 767 chiefs of police. Its leading facts were as follow:—The value of fireworks of American manufacture sold from 1866 to 1876 was £511,200. The value of those imported was about £300,000 add. The losses from 2 large fires directly traceable to them [Portland being one] was put at £5,000,000. The number of cities and towns having ordinances against fireworks and firecrackers was 491; of those without such ordinances 276. It had been anticipated that this year, being the Centennial of American Independence, would be attended with unusual losses from the greater displays of fireworks. Active precautions were taken; and the casualties were believed to be less than usual. About 100 towns had fires from this cause; 749 had none. The total results of the year as gathered from the sources indicated came out as follows:

Amount of damages, £30,852; number of premises occupied, 238; number of tenants at home at time of fire, 158; number of tenants absent at time of fire, 80; number of premises not occupied, 18.

The following useful figures were also obtained out of this inquiry:

Whole number stock fire ins. cos. doing bus. in U.S....	446	Making returns	347
" mutual fire ins. cos. doing bus. in U.S.	368	Making returns	149

Total number fire cos. doing bus. in U.S. ... 814 Making returns 496

A circular pub. by Mr. M. M. Fisher, Sec. of Straw Manufacturers Union, dated Medway, Mass., March 25, gave the statistics of the prems. and losses on risks of this class over a series of years. [STRAW GOODS MANUFACTORIES AS INS. RISKS.]

Up to Aug. of this year the fires in *Lond.* were 105 in excess of those of the previous year up to the same period.

The fires in the city of *New York* during the month of July this year were 244, or an average of 8 p. day. The total resulting loss was £34,955, viz. £17,674 on buildings, and £21,281 on stock. The ins. on buildings was £89,400, and on stock £149,431. The uninsured loss on buildings was £5448, and on stock £ —. The degree of heat experienced this month was understood to be greater than had been known for half a century.

The latest statistics from the U.S. show that during 1875—which is regarded as an average year—there was paid for fire ins. prems. £12,000,000, which covered £1,300,000,000 of ins.—being about nine-tenths of 1 p.c. prem.; the losses paid being estimated at £6,000,000. But in addition to the 12 millions of prems., there was the cost to the nation of the Fire departments: these are estimated at £5,000,000. While in *France* in the same year the fire insurance premiums were £3,000,000 for covering £3,200,000,000 of risk—showing a prem. charge of less than one-tenth p.c.; while the losses were estimated at £1,300,000. The cost of the Fire departments throughout *France* being estimated at £1,000,000 p.a. A writer in the *N. Y. [Daily] Times* uses these figures to show the waste by Fires in the U.S. If he had known more of the subject, in regard especially to the system of F. Ins. in *France*, he would have understood that no fair comparison of this kind could be made between these two countries.

With the view mainly of drawing attention to the steady destruction of accumulated property by fire we undertook the compilation of the T. given under FIRES, GREAT. It contains the record of close upon 2000 fires, most of which were of extreme magnitude. It compasses the range of the world; and it may certainly be said that for each one of the fires thus enumerated there are thousands unenumerated! The small fires swell up to much larger aggregates than the great ones. In *London* alone the total number of fires ranges from 1500 to 2000 p.a. Look at the U.S. with its tens of thousands of fires annually; and at *Russia* with its 25,000 p.a., involving the loss of many millions stg. Is it not a marvel that the so-called enlightened countries of Europe, as also of America and Canada, have never taken any steps to provide for the efficient record of their ann. fires? Not only would such returns enable us in process of time to calculate the per-

centage of property destroyed by fire; but from them many other important lessons might be learned. Among these, by comparison, the relative social and moral conditions of the people; periods of commercial depression and prosperity; the political discontent or otherwise; the probable proportion of criminal lunatics, etc. Is it to be supposed that *Russia* in collecting the returns of her ann. fires is actuated simply by a desire for statistical records—laudable as that desire would be? Is it not rather that the wise statesmen who rule over the destinies of that great empire read in these statistics the signs of political discontent, commercial advancement or adversity, and the good or bad government of its different provinces? If such statistics be possible, as they are certainly valuable, for one country, why not for all? By reason of the wider range of contrast which would be presented if all civilized countries compiled such returns, they would become increasingly instructive. We commend the subject to the earnest attention of the International Statistical Congresses in the future. We are glad to know that marked attention is being directed to the subject in the U.S.

Further statistics regarding Fires and Fire Ins. will be found under AUSTRIA; BELGIUM; BERLIN; CANADA; COPENHAGEN; DENMARK; FIRE INS. CENSUS; FRANCE; GERMANY; HAMBURG; HOLLAND; INDIA; ITALY; LONDON; POLAND; PORTUGAL; RUSSIA; SPAIN; SWEDEN; SWITZERLAND.

FIRES, WATER SUPPLY AT.—This subject has been incidentally considered under FIRE EXTINGUISHMENT, and under FIRE PROTECTION. It will be dealt with as a whole under WATER SUPPLY.

FIRST AND LAST DAYS INCLUDED.—It is usual, in order to prevent disputes, to insert in the modern pol. (*Life*) "the first and last day included."—*Annesley*, 1808. This practice arose in consequence of a dispute in Sir Robert Howard's case (1698). The case was this: A pol. of ins. was made to ins. the life of Sir Robert Howard for one year from the day of the date thereof; the pol. was dated on the 3rd Sept. 1697. Sir Robert died on the 3rd Sept. 1698, about one o'clock in the morning. Lord Holt held, that "from the day of the date" excluded the day, but "from the date" included it; "so that the day of the date must be excluded here, and the underwriter is liable." (2 Salkeld, 625.)

The point has also arisen in regard to marine pol. [COMMENCEMENT OF INS. RISKS.] [DURATION OF VOYAGE.] [TERMINATION OF VOYAGE.]

FIRSTBORN CHILDREN.—The mort. from childbirth being greatest during the first and second pregnancies, especially during the first, a great deal of interest has been evinced by the Regis.-Gen. and the officers of his department, to ascertain the number of first-born children, and the mothers, whose lives become sacrificed thereto. In the 30th Rep. of Reg.-Gen. pub. 1869, Dr. Farr offers the following obs. hereon:

How can we determine the number of firstborn children in England annually? It must evidently bear some relation to the marriages. Now the ann. number of legitimate children in the six years 1862-67 was 695,597, and the ann. marriages in the six years 1856-61, with which they may be fairly compared, were 162,681, of which 147,804 were marriages of spinsters: so that the births to a marriage are 4.776; the births to each woman married are 4.706. The births to each procreant wife—if only 133,024, or nine in ten wives, have living children—must be 5.229. Consequently as families consist of one, two, three, four, up to ten or more children, and every family has one firstborn child, it is evident that the firstborn children in wedlock will be to the total children so born as 133,024 to 695,597; or as 1 to 5.229. We can from these proportions infer that about 19 p.c. of the children in wedlock are firstborn; but to get the number of women bearing first children, the mothers of the children born out of wedlock must be brought into account, and some corrections must be made. This being done, it will be found that the 3600 ann. deaths in childbirth during the six years 1862-67 imply about 48 deaths to 10,000 delivered; and if, as is found by other obs., the mort. in first deliveries is proportionally to the mort. in subsequent deliveries as 2 to 1, the mort. among English mothers will be 80 in 10,000 for first children, and 40 for subsequent deliveries, taken in the aggregate.

In a note (p. 226) of same vol. Dr. Farr recurs to the subject, and considers there may have been at the period named an ann. addition of 30,788 firstborn children out of wedlock. Proceeding with his investigation, he says:

What is the proportion of firstborn to mothers in the pop.? Among the portion of the pop. born in wedlock nearly 1 in 5 or 19 in 100 are firstborn. This proportion could only be disturbed to any extent by emigration, or by a difference between the rate of mort. among the firstborn and the subsequent born children of families. *The proportions among the children not born in wedlock would be very different*; and there is reason to believe that the casualties of infancy cut down their numbers.

The number of men exceeds the number of women who marry more than once; hence the proportion of firstborn children to fathers is less than the proportion of firstborn children to mothers. Thus the mean ann. number of children born in wedlock in England (1862-67) was 695,597; the mean ann. number of marriages (1856-61) was 162,682; that is, 162,682 men married 162,682 women in those years; now if we divide 695,597 by the ann. number of husbands marrying one or more times in their lives, namely about 139,930, the mean number of legitimate children by one wife or more to each husband is 4.971.

In France the proportions of children are much lower: to each husband only 3.637 children are born to his one or more marriages; and taking 9 in 10 as fertile, the average family will consist of 4.041 children.

The firstborn to fathers in 100 of the pop. will be 18 in England, 25 in France; 1 in 5 or 6 in Eng.; 1 in 4 in France is a firstborn child.

Mr. Archibald Day in his paper: *On the Statistics of Second Marriages among the Families of the Peerage*, read before the Inst. of Act. 1865 [*Assu. Mag.* vol. xii. p. 205], offers the following obs. on this subject:

It is a very curious circumstance that although the number of female children born in second

marriages exceeds that of the males, the firstborn child is in the majority of cases a son. Thus out of 307 fruitful marriages, the firstborn in 168 cases (54·7 p.c.) was a son; and in the remaining 139 (45·3 p.c.) a daughter. I am quite at a loss to account for this apparent inconsistency.

I had proposed to work out the average duration between the date of marriage and the birth of the first child: but upon reflection that the most important feature in the consideration would be the age of the wife (in which my present statistics are comparatively weak), I have deferred until the investigation respecting first marriages, entering minutely into the question—offering, however, in the mean time, a short T. to show, out of 100 firstborn children, the number which have been produced in the 1st, 2nd, and subsequent years of marriage.

Here is the T. referred to:

Per-centage of Firstborn Children in each Year of Marriage.

	1st Year.	2nd.	3rd.	4th.	5th.	6th.	7th.	8th.	9th.
Boys	32·4	48·3	11·9	5·3	·7	·7	—	—	·7
Girls	37·4	44·9	8·4	7·5	—	·9	·9	—	—
Irrespective of sex	34·5	46·9	10·4	6·2	·4	·8	·4	—	·4

From this it would appear (remarks the author) that about one-third of the fruitful marriages produce children before the end of the 1st year: that in nearly one-half the first child of the marriage is not born until the end of the first year and before the close of the second; and that not more than one-fifth are without the blessings of offspring beyond 2 years. He adds:

The limits of duration, before the birth of issue, in the re-marriages under obs., are between 1 month and 9 years; both may be considered exceptional cases. Rather anticipating in consequence of its importance in regard to *issue risks*, and its exceptional character, I cannot forbear from quoting one instance from first marriage of a long-deferred birth. A lady aged 18 married to a husband aged 26, gave birth to her first and only child 29½ years after the date of marriage. She must, therefore, have been at the time of the child's birth, nearly 48 years of age. Perhaps it should be added that the infant died on the same day.

See also BIRTHS; CHILDBIRTH; DEATHS; FAMILIES; FECUNDITY; ISSUE, INS.

AGAINST.

FIRST SO. OF ASSU. for WIDOWS AND ORPHANS.—This scheme of mut. contribution—to consist of 2000 members, contributing 5s. to each death—was set on foot in Lond. on 6th April, 1699, by Mr. Stansfeld, and had its office at "St. Austin's Gate near the east end of St. Pauls." It is the first project of Life Ins. of which we have any knowledge. We shall give ample details concerning it under LIFE INS., HIST. OF.

It was orig. designated, "The So. of Assu. for Widows and Orphans;" but on a second and similar asso. being promoted in the following year the prefix "First" was given by way of distinction. It prob. died an early death; but many of the leading men of the day were among its members.

FISCAL.—Belonging to the Exchequer; revenue.

FISCHER, DR., pub. at Oppenheim in 1860: *Grundzüge des auf menschliche Sterblichkeit gegründeten Versicherungswesens*—Elements of the Science of Life Assu. For reference to this work, see *Assu. Mag.* vol. xiv. p. 454.

FISH DIET.—There has prevailed an opinion that persons living mainly on a fish diet were unusually healthy, and prolific; this belief has not stood the test of examination. [FECUNDITY, 1748.] [FOOD.] "Fishmongers experience fully as high a mort. as butchers." Dr. Farr, Sup. to 35th Ann. Report. [OCCUPATION.]

FISH, DR. [sometimes called Rev.] HENRY C., of New Jersey, U.S.A., has pub. in N.Y. a number of canvassing pamph. on Life Ins. in English, French, German, and Spanish; also several more pretentious works, viz.:

1868. *The Agent's Manual of Life Ins.*—a poor production. 2nd ed. 1873.

1872. *The American Manual of Life Assu.* Little more than a canvassing pamph.

This person has edited (1868) a pirated ed. of our *Insurance Guide and Handbook*, called an "American ed." This so-called editor says in a note by way of preface, and we suppose apology: "Not a sentence of the English ed. of any conceivable value whatever is omitted, while the additions amount to over one hundred and fifty pages. It now contains the fullest exhibit of facts, arguments and illustrations connected with Fire, Marine, Life, Tontine, and Casualty Ins., in all time, and in all parts of the world, of any work ever pub." The statement contained in the last 2 lines (emphasized by italics in the "American ed.") is essentially untrue. It was never the intention of the *Guide* to be more than an introduction to the subject of Ins. The 150 pages of scissors and paste work, which the "American ed." has added, exhibit neither genius nor industry; not indeed an average understanding of their purport. If the "American ed." had added one ray of light on the subject of insurance, we would gladly have set it off in mitigation of his barefaced robbery!

FISH, W. N., was Man. of North British Reversionary and Guarantee Co.

FISHER, CHARLES RICHARD, Act. of *Economic Life* since 1869. Mr. Fisher was trained to the bus. of Life Ins. under Mr. Rainbow, the late Act. of the *Crown*, which office he entered in 1840 as special assistant to the Act., and remained there a period of 29 years, becoming its Assistant Actuary. On his retirement he received a handsome testimonial of plate. Mr. Fisher is a Member of the Actuaries' Club.

FISHER, JAMES JOSEPH, was Sec. of the *Patriotic* of Dublin from 1850 to 1858.

FISHER, MICHAEL, was Sec. of *Laudable So. for Benefit of Widows*, from its foundation in 1761, and remained so down to 1780 or later.

FISHERY ANNUITIES.—In Jan. 1714 (or earlier) a scheme of annuities for terms and for lives was set on foot for the purpose of raising a stock for improving a fishery. We have given some account of the project in our hist. of ANNUITIES, under dates 1714 and 1716. In the *Postman* of 17 Jan. 1714 appears the following somewhat obscure adv.:

At the office for improving the Fishery of Gt. Brit. at the Pastry Cook below the Convocation House in St. Paul's Church Yard, Ins. is granted as usual, and Dividends of Gain arising by Trade, Casualty and Survivorship, are paid at Demand. Security against loss and prob. of gain are demonstrated in the Proposals to be had there. Subs. are also taken direct to the Fishery. Such as have not called for their money which became due the 20 Sept. Oct. Nov. and Dec. last may receive the same upon demand, as all other persons have always done, and never less than 60 p.c. gain.

What became of this remarkable project it is now impossible to say.

FISHERY INSURANCES.—The Ins. Ordin. of Hamburg—called Order of the City of Hamburg concerning Ins. and Average, anno 1731—enumerating under its third title, the things that may be insured, includes "Greenland and other Fisheries," and provides a special form of pol. for such ins. as follows:

Policy upon the Greenland and other Fisheries.

We the underwritten, for ourselves and our heirs, assure unto . . . the several sums by each of us respectively signed hereunto against receipt of the prem. agreed upon at . . . to *Greenland, Spitzbergen*, and all other Havens or Ports situated thereabout, on the Whale Fishery, the ship called the . . . whereof . . . or any other is commander, with all its appurtenances and equipage going and coming . . . to sail within or without the Ice, according as they shall judge the place most convenient for fishing, or to unload and load again, as necessity may require. Pray God conduct her in safety!

We take upon ourselves the danger and risk of all manner of damages that may accrue and happen to this ship, its equipage, or appurtenances, in any shape whatever during this present voyage, and so long as the Fishery lasts; whether by perils of the sea, storms and tempests, ice, running on shore, being sailed over, fire, neglect and steering a wrong course, arrests and restraints of Kings, Princes, and Republics, being taken and carried in by enemies, reprisals and confiscation, forcible plunderings of privateers or pirates, negligence or malice of the master and his mariners, or by any other means that can be devised or not; we put ourselves entirely in the place or stead of . . . to keep him free and harmless from any loss. And this risk takes its beginning from the day and hour that the ship first begins to be fitted out, and endures until the Fishery is ended, and the voyage completed and that she is safely returned. . . . and has there discharged her cargo.

We engage and oblige ourselves, all and each of us in particular, in case any misfortune or damage should befall this ship by the above-mentioned or any other means, that we will truly and without any exception pay the respective sums by us here underwrote, or such part thereof as shall be a full indemnification to the assured for the loss he has suffered, and for his extraordinary expenses, and this within two months after due notice has been given by the assured of the unfortunate accident and damage incurred, and the requisite proofs thereof have been produced. Consequently we submit ourselves to the Ordin. of the City of *Hamburg* relating to assu. and averages, with all the clauses and conditions thereof, whether printed or added hereunto in writing, which latter are equally valid as the printed ones, *nay even preferable to them*. For the true performance whereof we bind all our goods and chattels without fraud or deceit.

Thus agreed by . . . Sworn Broker. Hamburg the . . .

1807.—In *Hill v. Patten* Lord Ellenborough seemed inclined to hold that the word *cargo* in a pol. on a whaling voyage would only apply to the homeward-bound cargo, consisting of the immediate produce and result of the fishing adventure. (8 East, 373.)

In *Paddock v. Franklin* Ins. Co., Shaw, C.J., was inclined to think that an ins. on *cargo* would apply to the "outfits," though he gave no opinion on the subject, holding that it would protect "oil and other articles which are the ordinary products of the voyage, from the time the vessel first began to take whales." (11 Pick. 227.) Parsons thinks the application of the word in such a case would prob. be determined by usage.—*Maritime Law*, 1859, p. 200, n.

In *Rogers v. Mechanics* Ins. Co. the word "catchings" in a pol. on a whaling voyage was held to cover blubber or pieces of whale-flesh cut from a whale and on deck. (1 Story, 603.)

1815.—There was before the English Courts the case of *Phillips and another v. Champion*, wherein the facts were as follow: A pol. had been effected on 16 Sept. 1808, on the ship *Active* at and from Lond. to the southern whale and seal fishery, during her stay and fishing, and at and from thence to Lond., until the ship should be arrived back there; with liberty to proceed and sail to and touch or stay at any ports or places, particularly in the Channel, *Madeira*, the *Cape de Verd Islands*, the coast of *Peru*, *Chili*, *California*, *Brazils*, *Africa*, *New South Wales*, *New Holland*, *Malacca Islands*, the *Cape of Good Hope*, *St. Helena*, or elsewhere, to load and unload goods, refresh, seek, join, and exchange convoys, or otherwise; and for any and all other lawful purposes whatsoever, without being deemed a deviation. To return £2 p.c. if the ship arrived at her moorings in the *Thames* on or before the 16 Mar. 1810. In June, 1809, the ship was stranded on the coast of *New Holland*, and all her stores and provisions and 1236 seal skins—all she had then taken—were damaged by salt water, landed and afterwards sent home by another ship. The ship was afterwards lost by perils of the sea. The owners claimed first an average loss for the damage to the skins sent home, and afterwards a total loss for the ship. The underwriters contended that the produce of the voyage being sent home, the voyage had terminated, and they were therefore not liable for the total loss. The Court held, on appeal, sustaining judgment of Court below, that the voyage was not

terminated by the sending home part of what she had taken by another vessel, and clearly if the part sent home consisted of damaged skins, which would, if kept on board, have damaged the residue of the cargo. (6 Taunt. 3.)

In *France* this special branch of Marine Ins. has been continued. Here is the Tariff pub. Feb. 1850 :

FISHERIES.—*Whale Fisheries*— $7\frac{1}{2}$ p.c. for 18 months; $\frac{1}{2}$ p.c. more for each month longer; 12 p.c. for the entire voyage to *Iceland*. One fishing voyage 3 p.c.; 2 ditto, 5 p.c. To *Newfoundland* see rates below :

	Average Guaranteed.	Free of Average.
Outwards to the Bank or the Coast, the risk ending 24 hours after anchoring	$1\frac{1}{2}$ p.c.	$1\frac{1}{10}$ p.c.
Homewards from the Bank or the Coast, the risk commencing on weighing anchor	$1\frac{1}{2}$ "	$1\frac{1}{10}$ "
Outwards, and making one Fishing Voyage, the risk ending on weighing anchor	2 "	$1\frac{1}{2}$ "
Outwards to the Bank or the Coast, making one Fishing Voyage and returning to a port on the Ocean or the Channel	3 "	$2\frac{1}{2}$ "
Outwards to the Bank, Fishing Voyage thence to the Coast, and returning as above	$3\frac{1}{2}$ "	$2\frac{1}{2}$ "
Outwards to the Bank, fishing on the East and West Coasts, and returning as above	4 "	3 "
<i>Increase</i> .—According to the conditions accorded for the combined voyages, all the increase of prem. for putting into ports, etc., are added to the orig. prem. subject to being finally returned according to circumstances :		
Touching at Croisir or Pile de Ré for <i>Salt</i>	$\frac{1}{2}$ p.c.	$\frac{2}{10}$ p.c.
" St. Ubes for ditto	$\frac{1}{2}$ "	$\frac{1}{10}$ "
From the Fishing ground to St. Pierre, Miquelon, discharging cargo and returning for a new fishing	$\frac{1}{2}$ "	$\frac{1}{10}$ "
From the Fishing ground to the Antilles before returning to France	$1\frac{1}{2}$ "	$\frac{2}{10}$ "
From the Antilles to France	$1\frac{1}{2}$ "	$1\frac{1}{10}$ "
Touching to disembark the Fishermen, before the return to home port	$\frac{1}{2}$ "	$\frac{2}{10}$ "
Homewards from Newfoundland or the Antilles, direct to port in Mediterranean	$\frac{1}{4}$ "	$\frac{2}{10}$ "
Touching at any port in the Mediterranean, for each	$\frac{1}{4}$ "	$\frac{1}{10}$ "
Returning from the Mediterranean to a port on the Ocean or the Channel	2 "	$1\frac{1}{2}$ "
First departure from a port, on the Ocean or the Channel, for any other port	1 "	$\frac{2}{10}$ "
Putting into any other port on the Ocean or Channel	$\frac{1}{2}$ "	$\frac{2}{10}$ "
Additional for Rouen or La Somme	$\frac{1}{4}$ "	$\frac{1}{10}$ "
Ins. for the year	$7\frac{1}{2}$ "	5 "

France, being a Catholic country, has always offered facilities to her fishermen.

In *Gt. Britain* the ins. of vessels engaged in the fishings is almost invariably undertaken by the local marine ins. clubs.

FISHING TACKLE.—Whether this be included in a pol. upon a ship depends on the usage of the port or place where the ins. is effected.—*Marshall*.

By the 53 Geo. III. c. 159 (1813), the fishing stores of a ship employed in the usual manner in the Greenland Fishery, belonging to the owners of the ship, were to be valued as part of the ship in estimating the liability of the owner for damage. See Haggard's *Admiralty Rep.* 1, p. 109 (1843).

The Fishing Tackle usually forms a distinct item of ins. in *Gt. Britain*. It is, however, generally included under ins. of "Outfits." [OUTFITS.]

FISK, J. L., Underwriter of *Universal Marine* since 1866.

FISTULA (Class, *Local*; Order, Diseases of DIGESTIVE ORGANS).—Allen, in his *Medical Examinations for Life Ins.*, 5th ed. 1869, says: *Fistulæ* are of importance, as indicative of local or general disease, or both. Locally they may indicate the presence of a foreign substance at the bottom, as more particularly a bit of dead bone or cartilage. In each of these instances the surgical pathology becomes the prime point of inquiry. "Some life cos. vaguely instruct their examiners that *Fistulæ* are a positive cause of rejection. In this case *Fistulæ* in ano is evidently the difficulty intended. But whether *fistula in ano* should reject depends wholly upon its cause and extent." He gives further details.

Tailors are peculiarly liable to this complaint. According to Mr. Thackrah there is or was a *Fistula Club* among the tailors in Stultz's employ.

The deaths from this painful class of disease in England are not numerous, but show some fluctuations. In 10 consecutive years they were as follows: 1858, 116; 1859, 99; 1860, 115; 1861, 115; 1862, 109; 1863, 89; 1864, 108; 1865, 88; 1866, 108; 1867, 100. Over a period of 15 years ending 1864, the deaths averaged rather more than 5 to each million of the population.

The deaths in 1867 were: Males, 67; Females, 33; chiefly between ages 25 and 70.

FITS.—These, as such, have no place in the classification of the causes of death. Those they rank under are of several heads, as APOPLEXY; EPILEPSY; or SYNCOPÉ. In *Smee's Mind of Man* (1875) is the following: "Any interval of unconsciousness, except sleep, is called a fit." But all who are engaged in the practical bus. of life or accident ins. know the signification of the inquiry, "Is the proposer subject to fits?" or "Has the proposer suffered from fits of any description?"

On the LAW of the subject there are the following cases:

1835.—In the case of *Chattock v. Shaw* [*Eagle Life*], before the English Courts this year, it was held, that where a pol. of ins. contains a warranty that the assured "has not been afflicted with, nor subject to, gout, vertigo, fits," etc., such warranty is not broken by the fact of the assured having had an epileptic fit in consequence of an accident. *To vacate such pol. it must be shown that the constitution of the assured was naturally liable to fits, or by accident or otherwise had become so liable.* (1 Moody and R. 498.) This is the leading case upon the subject.

Mr. Bunyon, in his *Law of Life Assu.*, 2nd ed. 1868, commenting upon the subject of warranties, enlarges upon this case as follows:

Where the declaration averred that the assured had not been afflicted with, nor was subject to fits, it was considered that the true construction was not that he had never had a fit, but that he was not a person habitually or constitutionally afflicted with fits; a person liable to fits from some peculiarity of temperament either natural or contracted from some cause during life. It was therefore held that the pol. was not vitiated by the circumstance that, in consequence of a fall, he had had two epileptic fits within a short interval several years before the date of the pol., but which the jury were satisfied had never recurred.

Mr. Bunyon is properly of opinion that if the warranty had "amounted to a statement that the assured had never had a fit, the result must of course have been different."

1848.—In *Rose v. Medical Invalid Life* the facts were these: The proposer was subject to epileptic attacks. The Co. undertook to insure diseased lives; fixing the amount of prem. in each particular case according to the circumstances attending it. The Co. transmitted to its agent a letter addressed to the proposer, accepting the life at a prem. of over 20 p.c.; but, owing to an unfavourable change in the proposer's health, the agent did not deliver the letter. The case came before the Scotch Courts this year, when it was held—1. That in such a case it was necessary that the letter should have been communicated to the party, and that he should have intimated his acceptance of the terms and conditions it contained; and therefore no completed contract of insurance was constituted. 2. That in a question whether the contract had been so completed, the Co. was entitled to an issue as to whether, during the negotiations, there had been a material change of risk: although they merely averred that the fits had been more frequent and violent, and not that there was any new and different disease. (11 Dunlop's Sessional Cases, 158; 20 Scottish Jurist, 534; 21 Scottish Jurist, 29.)

1857.—In the case of *Shilling v. Accidental Death Ins. Co.* the proposal, which formed the basis of the contract, stated that the insured was not subject to "epileptic or other fits." The evidence showed that fainting fits, to which he was subject, were not deemed "fits" by medical men, and it was therefore held, that the representation was not untrue. (27 L. J. Exch. 16.)

Regarding the MEDICAL view there is the following:

1857.—Ward, in his *Medical Estimate of Life Assu.*, says:

It is not always easy to determine the nature of a fit or fits from which an individual is said to have suffered at some previous and perhaps distant period. When there is any doubt, it is best not to incur the hazard of recommending the life. An attack of syncope dependent on some evident exciting cause, as gastric derangement, exhausting discharges, or severe physical or mental exhaustion, offers no objection to a life that has subsequently been in all respects good. One attack, however slight, of unquestionable apoplectic character, or of paralysis dependent upon whatever cause, renders a life quite ineligible. Attacks of giddiness, headache, epistaxis, or cerebral congestion, or habitual costiveness, or an irregular or intermittent pulse, are fatal objections if occurring in subjects either personally or hereditarily predisposed to apoplexy. . . . One attack of mania, or even hypochondriasis, or mental or nervous excitement or depression, where there is hereditary tendency to insanity, would disqualify for life assu. (p. 58.)

1869.—Dr. Adams Allen, in his *Medical Examinations for Life Ins.*, 5th ed., says:

Fits.—Under this general and vague designation the ins. forms prominently intend epilepsy in its various phases. When epilepsy is clearly present, whatever its degree or frequency of manifestation, it utterly disqualifies. Not that it necessarily shortens life *per se*, but because, even without this usual result, it may impair the mental faculties, or dispose to accidents, which essentially impair the risk. The epileptiform convulsions of primary dentition, and the changes incident to that epoch, if they have not manifested a disposition to return, or injured the mental faculties, or involved paralysis, in later life do not disqualify. The irregular muscular contractions of simple hysteria, unless connected with organic disease, or general cachexia, do not prevent acceptance. Males of nervous temperament sometimes manifest symptoms very like those of Hysteria with its queer symptoms—such cases should be carefully investigated; but these symptoms do not necessarily disqualify. Youths of both sexes, about and after the age of puberty for several years, may exhibit mild or severe epileptiform symptoms, or even decided periodical convulsions: yet if these either spontaneously, or under treatment, subside, it may be laid down as a rule that if after several years they do not recur, the risk is a good one. The age of 25 in the male, and 23 in the female, may be considered critical in this regard. (p. 36.)

FITZ-GEORGE, OWEN.—Man. of City Branch of *Briton Life*, and *Britannia Fire* since 1875, was previously Sub-Man. of Lond. branch of the *Azienda*. While at an earlier date he had represented the *Briton* and *Britannia*.

FITZHUGH, JOHN, pub. 1864 a pamph.: *Hints on Life Assu., with selected Examples and Illustrations*. This will be spoken of under LIFE INS., PRACTICE OF.

FIXED BONUSES.—The *Liverpool and London* for many years guaranteed to its parti. life pol.-holders a fixed rate of Bonus add. to their pol. We do not remember that the plan has been adopted by any other life office. The subject will be referred to more in detail in our hist. of that Co.: also under SURPLUS, DISTRIBUTION OF.

In most life offices it is now usual to fix the rate of parti. in the event of the pol. becoming a claim between the Bonus periods. This is simply a matter of convenience. When the actual rate is ascertained and declared, the provisional rate for the period in question no longer holds. [PROVISIONAL BONUSES.]

FIXED MACHINERY.—This includes engines and main or line shafting, and such as is ordinarily fastened to the building, and would naturally pass with the realty: though counter-shafting, pulleys, and hangers are not usually considered as fixed machinery.—Griswold's *Fire Underwriter's Text-book*. [FIXTURES.] [MACHINERY.]

FIXED PREMIUMS.—A term which in earlier times had a greater significance than it now has. In the early contribution sos., alike for life and for fire, the contributions, ann. or otherwise, varied with the varying fortune of the offices, during the particular period to which the contribution related. When the proprietary offices, with subs. caps., started into being, they were able to insure for "fixed prems.," and so all uncertainty was removed. In the marine ins. clubs of the present day the contributions fluctuate with the fortunes of the so. The same in many of the local mutual fire offices in the U.S. and Canada.

FIXTURES.—In a legal sense fixtures are things of an accessory character attached to houses or lands, which become immediately on annexation part of the realty itself. But in an ins. sense, as indeed now in a legal sense, the term has other meanings. The law recognizes as "tenants' fixtures" many articles necessary for the complete furnishing of a house, as window blinds, brackets, gas and bell fittings and other things which are but slightly attached to the freehold. And so again "trade fixtures," which have been affixed to the freehold for the purposes of trade and manufacture, and which may be removed without material injury to the estate. Hence furnaces, coppers, brewing vessels, fixed vats, salt pans, fixed scales, hoisting apparatus, and the like; machinery in breweries, collieries, and mills—such as steam-engines, cyder mills, etc. Buildings for trade, as a varnish house, built on plates laid on brickwork, or a shed formed of uprights rising from a foundation of brick: known as a Dutch barn.

By the 14 & 15 Vict. c. 25, s. 3 (1851), an agricultural tenant may specially agree with his landlord as to the erection and removal of farm buildings; and also as to removal of chimney pieces, ranges, wainscot fixed to the wall with screws, and many other enumerated articles.

From an ins. point of view, whatever a tenant may remove he has a clear insurable interest in, and therefore can insure under the general description of "tenants' fixtures." Whatever he cannot remove attaches to the freehold and forms part of the property insured by the landlord. The same in regard to "trade fixtures."

There is yet another class of recognized fixtures. These are "shop (or store) fixtures," including shelving, counters, glass show cases, and even frequently the shop windows and glass doors, such as have been fitted for the purposes of trade, even down to large mirrors. Sometimes even frescoed walls, carving, gilding, and stucco work are included as shop fixtures. When these are insured, they are required to be specifically named in the pol., and usually a maximum sum set against each item.

Signs of metal or wood painted and placed upon the outside of buildings are not included in trade or shop fixtures, unless so specified in the proposal. Nor are they included in the landlord's ins. without specification.

In the State of *Ohio*, "store fixtures," when the property of the owner of the building, are held by statute to be covered by a pol. on the building, without further specification.

1845.—Mr. T. Chambers and Mr. G. Tattersall pub.: *Laws relative to Buildings, comprising the Metropolitan Building Act, Fixtures, Ins. against Fire, etc.*

1864.—In *Ex parte Gorely, in re Barker*, Bankruptcy appeals, it was held, that trade fixtures put up by a tenant, being removable by him, are not comprised in the expression "house or other buildings" in the statute of 1774. [REINSTATEMENT.] Therefore where such fixtures are separately insured and destroyed by fire during the tenancy, the landlord is not entitled to have the ins. money laid out under the Act: and a covenant by the tenant to deliver up the fixtures at the determination of the tenancy makes no difference in this respect.

The skill and experience of the adjuster are frequently called into play in dealing with this question of Fixtures. Agents writing pol. should exercise much caution. [FIXED MACHINERY.] [MOVABLE MACHINERY.]

FLAG.—On board ship the flag is employed to designate a vessel's nation and employment; and also as a means of communicating intelligence. The national flags are standards, ensigns, and pendants. Brit. vessels bear in add., as a distinguishing mark, the Union Jack. Flags of occupation are the particular emblems borne by Admiralty and War Department Vessels, yachts of the several clubs, ships belonging to companies, pilot

boats, etc. Flags of intelligence are of three shapes—square, triangular, and burgees: they are one of two colours, and each represents a number or letter. By combinations messages may be transmitted with great rapidity as far as a telescope can cover.—*Brande.*

Ships are presumed to belong to the country under whose flag they sail; and it has been thought that this presumption should be conclusive, on the ground that no owner should be permitted to deny the character under which he seeks protection and safety. (1 Rob. Admiralty Rep. 1.)

In the case of neutral ships in time of war the flag as well as all other things must conform to the warranted neutrality, or the ins. will be placed in peril.—*Parsons' Maritime Law*, 2, p. 114. (See next art.)

FLAG OF TRUCE.—In periods of maritime warfare in Gt. Brit. it has been customary to write at the foot of pol. of marine ins.: *Warranted a flag of truce for the voyage*; and in others (after describing the voyage) was added: *The ship being a flag of truce for the voyage*. The nature of the risks sometimes so undertaken may be gathered from the following case.

1745.—In the case of *Hill v. Spencer*, before the Brit. Courts this year, the facts were as follow: The ship *Tryal*, Wm. Jeffreys, master, was taken up by the Gov. of Carolina as a Flag of Truce, to go to *Havanna*, with pretence to bring from thence some Palatines, lately taken and carried in there by an English ship; and by this occasion several Carolina merchants loaded goods on board her to a very considerable value, and directed their agent in Lond. to get £10,000 insured on them, and at the same time to inform the underwriters of every circumstance of the voyage, viz. that the cargo consisted of 80 or 90 negroes, and the rest manufactures of Gt. Brit. and Germany, all which was to be regularly cleared out for *Providence*, where the vessel was to have liberty to call, in her voyage down for a pilot. It was also mentioned as a prob. that one master of the Spanish language might go in the character of Captain of the Flag, by the aforesaid Gov., and Jeffreys only appear as pilot, though the latter was to sign all bills of loading; and the same ins. was ordered from the *Havanna* to *Carolina*, as was made to *Havanna*. The Lond. agent got the £10,000 insured at four *private offices* [this term private offices is peculiar, inasmuch as there were but 2 authorized marine ins. offices at this date existing in Lond., see MARINE INS., HIST. OF] at and from S. Carolina to the *Havanna*, and at and from thence back to S. Carolina, with liberty to touch at *Providence*, outward and homeward bound, upon any kind of goods, laden or to be laden on board the ship called the *Tryal* (or Flag of Truce ship), Wm. Jeffreys master; beginning the adventure from and immediately following the loading thereof aboard the said ship at South Carolina, and so to continue until the said ship, with the goods whatsoever, should be arrived at the *Havanna*, and so should further continue till arrived back at S. Carolina, and the same there safely landed; and it should be lawful for the said ship on that voyage to stop and stay at any ports and places whatsoever, more especially at *Providence*.

The *Tryal* sailed from S. Carolina to the *Island of Providence* (after the captain had received his credentials from the governor as commander of a Flag of Truce ship), where she arrived and disposed of part of her cargo, and then sailed directly towards *Havanna*, and being arrived near the entrance of the harbour, was seized by a Spanish ship of war, and carried into the said place, where her loading was condemned and sold, and the ship's officers and sailors detained near 5 months; at the expiration of which time the Governor of *Havanna* permitted them to return, with some Englishmen, who had been made prisoners, but without the Palatines they went to reclaim; and the Governor gave the captain a protection from being molested by men of war or privateers.

The London agent, on receiving advice of the above-mentioned loss, demanded the money of the insurers, who resisted the claim. The agent, in support of his demand, offered to produce the invoice, bill of lading, credential letters, and an affidavit under the seal of the Province of Carolina attesting that the goods contained in the invoice were shipped, and witnesses who were ready to prove *viva voce* the capture and sale of the goods at *Havanna*, the detention of the mariners, and that the ship returned, as a *Flag of Truce*, with 49 English prisoners to Carolina. On the other side, the underwriters asserted that this was an illicit trade; that the ship was not a Flag of Truce, or if she was so, that the insured by warranting her to be so, did in effect engage that the goods should be exempt from seizure. That to entitle the plaintiffs to a recovery, it was incumbent on them to show the condemnation and the reasons of the confiscations at *Havanna*; and many other arguments were used to set aside the pol.; but the jury found a verdict for the plaintiffs.—*Lex Mercat. Red.* 267.

FLAGRANTE BELLO.—During hostilities; or while a war is going on.

FLAME.—The combustion of an explosive mixture of inflammable gas, or vapour, with air.

FLANDERS.—A former district or country in Europe, now included in Holland, Belgium, and France. It extended on the German Ocean from the Schelde to the entrance of the Straits of Dover. The origin of the name is unknown. It occurs for the first time in the 7th century. For some centuries Flanders occupied a very important position in regard to the commerce of Europe. The city of *Bruges* was its capital. [BRUGES.] [DAMME, JUDGMENTS OF.]

1240.—Under FIRE INS., HIST. OF, we have given an account of the Law of *Cora*, or *Keura*, promulgated by Thomas, Count of Flanders, and Johanna his Countess, this year, in regard to contributions in case of fire.

1310.—A Chamber of Marine Ins. is stated to have been founded in *Bruges* this year. We have given an account of it under BRUGES. We also review the doubts expressed regarding this circumstance under FLANDERS, CHRONICLE OF.

1400.—Uzzano, in his *Treatise on Commerce*, compiled this year, speaks expressly of insurances made at *Florence* (Pisa) for London, and for *Bruges*. [MARINE INS., HIST. OF.] [MARINE INS. PREMS.]

Hallam, in his *View of the State of Europe during the Middle Ages* (8th ed. 1841, vol. ii. p. 382), says:

A writer of the 13th century asserts that all the world was clothed from English wool wrought in Flanders. This, indeed, is an exaggerated vaunt; but the Flemish stuffs were prob. sold wherever the sea or a navigable river permitted them to be carried. . . . All Christian kingdoms, and even the Turks themselves, says an historian of the 16th century, lamented the desperate war between the Flemish cities and their Count Louis, that broke out in 1380. For at that time Flanders was a market for the traders of all the world. Merchants from 17 kingdoms had their settled domiciles at Bruges, besides strangers from almost unknown countries who repaired thither. . . . Ghent was one of the largest cities in Europe, and in the opinion of many the best situated. But Bruges, though in circuit but half the former, was more splendid in its buildings, and the seat of far more trade; being the great staple both for Mediterranean and northern merchandise. Antwerp, which early in the 16th century drew away a large part of this commerce from Bruges, was not considerable in the preceding ages; nor were the towns of Zealand and Holland much noted except for their fisheries; though these provinces acquired in the 15th century some share of the woollen manufacture.

Further reference will be made to Flanders under HANSEATIC LEAGUE. [ANTWERP.] [BRUGES.]

FLANDERS, CHRONICLE OF.—Pardessus, in his *Collection de Lois Maritimes*, vol. 2 (pub. 1831), gives an account of the founding of a Chamber of Ins. in the city of Bruges in the year 1310, as set forth in our art. BRUGES, which he had drawn from the *Chronicle of Flanders*. But being unable to discover the origin of the Laws or *Chronicle* from which he had so quoted, he proceeds to remark:

We might suppose that ins. by prems. were in use at Bruges in 1310, if the *Chronicle of Flanders* deserved our entire confidence. But is a chronicle which does not appear to have been written by a contemporaneous hand of unchallengeable authority, when no other document justifies its enunciations? By what singular circumstance did it happen, that the regulations assumed to have been given in 1310 by a Count of Flanders to the Chamber of Assu. at Bruges, fell into forgetfulness by a people who, during and since the 14th century, have never ceased to devote themselves to commerce? If the contract of ins. was known at Bruges in 1310, to such an extent as to have attracted the attention of the legislator, why is there no trace to be found of it in the maritime usages of the Southern or Northern Netherlands, which I have pub.? Limiting myself to bringing forward these doubts, I should remark that the first law promulgated upon ins. in Flanders is of the year 1537.

In his 4th vol., pub. 1837, he returns to the subject, and modifies his former opinion as follows:

I should then, in good faith, acknowledge that I expressed myself in too absolute a manner when (in vol. ii.) I rejected the idea that ins. were known in Bruges in 1310. I continue to think that the *Chronicle of Flanders*, the only work which contains this assertion, is too modern to inspire confidence. But the author had perhaps some traditions, which should incite the savans of Flanders to make researches. If, as it does not appear to me possible to doubt, a document of 1318 testifies that ins. were known at Pisa, . . . it is natural to suppose that their usage was even more ancient, because these documents infer a known and existing state of things.

In his final vol.—the 6th, pub. 1845—he again notices the point, while relating the Portuguese practice of freighters and owners joining in a kind of reciprocal ins. to provide indemnity against sea-risks, and says:

Seeing that these documents belong to the second half of the 14th century, and that at this epoch Portugal had very habitual commercial intercourse with Flanders, one may think that I was wrong (in previous vols.) to consider improbable the assertion of the author of the great *Chronicle of Flanders*, respecting the existence of the Chamber of Assu. at Bruges, in 1310; and I admit, that the improbability which had struck me now appears to me diminished. Nevertheless, I must say, that the law attributed to the Count of Flanders is unknown at the present time; besides which, the *Chronicle* speaks of a system of prem. ins., whilst the institution of King Ferdinand of Portugal was a mut. ins.

1711.—Verwer, a Dutch merchant, pub. this year: *Nederlands Sec-rechten*—the Sea Laws of the Netherlands—wherein he claimed that the Judgments (or Decisions) of Damme were the more ancient and original compilation, and the Rules d'Oleron merely a copy of these.

Reddie, in his *Historical View of the Law of Maritime Commerce*, pub. 1841, and regarded as a work of the highest authority, says:

The fertility of the soil, the facility of interior communication by navigation, led at an early period—about the 10th century—to the estab. of great fairs in Flanders, and to the cultivation of internal commerce; and in the 13th and 14th centuries the cities of Bruges and Damme, situated near each other, carried on, from their common seaport, Sluys, an active and extensive maritime traffic; Flanders thus becoming and serving as an intermediate station and dépôt for the Southern and the Northern Countries of Europe. Such a state of maritime commerce of course required regulation, and like the other nations of Europe, the Flemings, or Belgians, before estab. regular digests of laws, appear to have been guided by customs and usages, which several writers have pub. from manuscripts, under the appellation of *Judgments of Damme*, or *Laws of West Capelle*. But in estab. or recognizing these usages, the Flemings appear not to have aimed at anything new, but to have been satisfied with adopting the usages of the neighbouring nations, who had had longer experience in maritime affairs: hence these usages are almost a literal copy of the first 24 articles of the *Rules d'Oleron*—the most ancient and best authenticated portion of that compilation.

Referring to the claim set up by Verwer, already noticed, he proceeds:

It is a matter of historical fact, that the maritime commerce of Guyenne, Bretagne, and Normandy,

whose ports, products, customs, and navigation are indicated in the *Roles d'Oleron*, was more ancient than that of Flanders, which is admitted by Verwer himself to have flourished only at a later period. He thought, indeed, he had discovered in the MS. of the *Judgments of Damme* an art. not to be found in the *Roles d'Oleron*: but even that art. exists in the MS. of France and England, and in the Castilian translation; and there is in the two compilations not merely a resemblance of ideas, but such a conformity of expression—with the sole difference that in the *Judgments of Damme* the name of Slays is added to the names of the French ports mentioned in the *Roles d'Oleron*—and such a literal and complete similitude, that the one must necessarily be held to be the translation of the other. Besides the compilation itself proves that it could only be made in France, and for the coasts of France.

It being thus clear that the Flemings borrowed the *Judgments of Damme* from the orig. 24 art. of the *Roles d'Oleron*, it remains to be inquired whether these art. were communicated to Flanders through England, or whether they were taken and received directly from France; and from the description of the commodities, and the nature of the trade between the countries, as described in the *Roles d'Oleron*, it rather appears the Flemings derived them directly from France; but at what precise time the introduction took place it is not easy to determine. From the connexion between the countries, it may prob. have occurred soon after the *Roles d'Oleron* were committed to writing, in the 13th century, and at all events during the 14th.

Mr. Frederick Hendriks, in his *Contributions to the Hist. of Ins.*, etc., pub. in the *Assn. Mag.* (vol. ii.), from which we have already quoted in this art., says:

It seems to me plain that Bruges was pre-eminently a city whose trade required some regulations on Marine Ins., such as those referred to. Its ancient political [? importance] arising from a vastly spread commercial industry is perfectly well known. It is sufficient to recall the fact—that in the 14th century, its ships were reckoned by thousands, and its traders by tens of thousands. In Uzzano's treatise we see the Bruges prem. definitely cited. [MARINE INS. PREMS.] The municipal arrangements of that city were not of such a class as would remain behind the most enlightened of the period; nor was its mercantile community too proud to learn the systems of others, as is evinced (to give but one instance) by the missions addressed to the Barcelonense on the subject of the form and particulars of Bills of Exchange. And its usage of the contract of nautical interest (which throughout this inquiry we have taken to be the primitive form of ins.) cannot be doubted. [BOTTOMRY.]

The circumstance of the Laws or Regulations on Ins. said to have been enacted by the Count Robert, not being preserved to the present time, does not interfere with the prob. of their having existed.

Nor is it at all clear that we are justified in concluding that the passage in question from the *Chronicle of Flanders* is not by an ancient hand. There is ground for believing the contrary, and that the burden of proof should belong to those who assert the negative. The title of the orig. is easily enough to be interpreted: *Chronicle of Flanders, beginning from the year 621, to the end of the year 1735: all gathered from ancient writings by M. D. and F. R.* 3 vols. fo. Bruges, 1736. . . . The passage under date 1310, referring to the Chamber of Ins., is incorp. in the body of the *Chronicle* precisely in the same manner as are all the other facts it contains, viz. without precise reference to the individual authority or authorities; and the words in parenthesis, which compare the mode of ins. to what "is practised to the present day" . . . may legitimately be ascribed to Messrs. M. D. and F. R., the compilers of the collected *Chronicle* in 1735. This is evidently the only part of the orig. on which any opinion could be based, that the authority for the body of the quotation is not ancient; unless, indeed, the texts of the writings from which the *Chronicle* is gathered were searched all through, which perhaps I need not say would be a Quixotic adventure. . . .

This subject will be again referred to in our art. MARINE INS., HIST. OF.

FLANDERS, HENRY, has pub. the following works on Insurance subjects:

1. *A Treatise on Maritime Law*, pub. in Boston, U.S., 1852. A useful practical work.
2. *The Law of Shipping*, pub. in Philadelphia, 1853. This was spoken highly of by Prof. Greenleaf.
3. *A Treatise on the Law of Fire Ins.*, pub. in Philadelphia, 1871. In the preface occurs the following passage:

The author has endeavoured in the following work to systematize the principles deducible from the numerous decisions of our Courts upon the complex subject of F. ins., and thus exhibit in convenient form the present state of that branch of the law. In going over such an extensive field of inquiry, he cannot flatter himself that he has been so fortunate as entirely to avoid error and mistake. And he would be grateful to his professional brethren, if, in following his footsteps, they would point out to him any defects they may chance to discover in the way, so that he may be able in any future ed. to correct them.

This is very modest, but hardly necessary: for so far as we are able to judge by constant reference to the book, the author has accomplished his purpose in an admirable manner.

Mr. Flanders is the author of other works outside Ins. topics, *vide* Allibone.

FLANNEL MILLS AND MANUFACTORIES.—The ins. of these in Great Britain comes under the Tariff regulations, which are very minute concerning them. Where steam power is used, the rates are much in excess of the rates on those worked by water power. In the U.S. they rank under the head of "specials." [FIRE INS. CENSUS, Wool.]

FLAX.—A vegetable product cultivated for its fibre and seed; and "next to cotton the most extensively used raw material for textile manufacture in the vegetable kingdom." The average ann. production of fibre was estimated by Robt. Hunt (*Use's Dict. of Arts, Manufactures, etc.*, 1867) at 400,000 tons; the quantity of seed at 2 million quarters. "At the average value of fibre and seed, the ann. production of all countries, of the former, may be given in value at £20,000,000, and of the latter at £5,000,000, making in all £25,000,000 as the worth of the raw produce, before its conversion into woven fabrics, and feeding stuffs."

Flax is produced mainly in Russia; but also in many other countries of Europe. It gives rise to a large amount of ins. bus., alike in marine and fire. It has too an importance in regard to life ins., by reason of the injury to health resulting in the manufacturing processes to which it is subjected. [DECOMPOSITION.] [FLAX DRESSING.]

Dundee (Scotland) became the great entrepôt of the Flax Trade in Gt. Britain, and many serious fires resulted from carelessness of storing. [FIRES, GREAT.] The *Dundee Advertiser*, after the great fire of June, 1855, said :

. . . From the general manner of storing flax in Dundee it might be supposed either that flax is not inflammable or that the burning of it is specially intended and provided for. There was not a fire-plug near the building now reduced to ruins, and those at some distance, with the hose and apparatus, were in anything but a sound condition ; while as to the building itself, none could have been better constructed for the purpose of combustion. The crackling of the timber in it resembled the roar of a cataract. If it had been seriously proposed to get up a vast bonfire in the centre of the town, arrangements could scarcely have been better made to secure the material that would blaze the brightest and the swiftest, and the position where it would run the least hazard of being extinguished. . . .

All this was too true ; but it has now been altered.

FLAX DRESSING.—We have already spoken of the injurious effects of the dust arising in manufacturing processes, mainly from irritation by reason of its mechanical irregularities of form, and its insoluble character. The *spicula* of Flax given off in the process of Flax-dressing produce pulmonary disease, obstinate in character, and frequently fatal in its ultimate results, *vide* Mann's *Medical Statistics*, p. 139.

FLAX AND JUTE MILLS AND WAREHOUSES.—These are all Tariff risks, the regulations concerning which differ in the three divisions of the kingdom, as regards the mills.

As early as 1829 Mr. Mackenzie, of the *Scottish Union*, was in correspondence with the *Sun*, *Phoenix*, *Imperial*, and *Atlas* in view of fixing a uniform Tariff for Scotland. The rates were soon afterwards fixed as follows :

<i>Flax Mills</i> , warranted no Carding of Tow or Heckling therein	.....	16s. p.c.
Ditto with Carding of Tow	.....	18s. „
Ditto with the addition of Heckling	.....	20s. „

The following regulations of the Tariff now apply :

England (Mills).—An ordinary non-fireproof mill at the minimum rate is one built of brick or stone, slated or tiled ; in one tenure ; heated by steam or low-pressure hot water apparatus only, and lighted only by gas ; with separate boiler-house ; working single time ; having stone staircase, and no hoist, spout, or well-hole ; no carding or heckling being done ; no teasers, breaking cards, or cards with fancies being used ; nor jute ; the spinning process being wet ; and the total height not exceeding 6 floors. Variations herefrom cause add. prems. to be charged. Thus, if jute is used, or if any of the spinning is performed dry, there is a considerable add. All iron doors are expected to be set in stone or metal. Teasing and heckling-houses, and boiler-houses pay advanced rates.

Ireland (Mills).—There is a separate Tariff ; but the description of the normal class is pretty much the same as the foregoing. Scutch mills and scutch waste mills are not embraced in the Tariff ; nor any mill in which the scutching process is carried on.

Scotland (Mills).—An ordinary non-fireproof mill in Scotland, passing at the minimum rate for fire ins., is in one tenure ; no carding, machine heckling, hand heckling, teasing, being done ; no jute used ; not more than 2 days' consumption of raw material being on the premises at one time ; no batching in bulk done ; no mineral oil used ; working single time only ; boiler-house outside mill. Add. prems. are charged for all the variations from this standard. Teasing, cording, heckling, and batching houses carry heavy extra prems. on account of excessive hazard.

Scotland (Warehouses).—These are special risks, coming under the Tariff for warehouses and sheds used wholly or in part for the deposit of flax, tow, codilla, hemp, jute, and coir, in any part of Scotland. [The special district in *Dundee* is excepted.] The following are briefly the conditions for the normal rate : not more than 100,000 cubic ft. ; external walls not less than 18 in. thick ; entire party-walls same thickness ; no communication with other buildings, or communications closed by double iron doors ; roof covered under the tiles with close boarding or sarking, or with lath and plaster ; in single tenure ; having one superintendent only ; no office or counting-house in the building ; no artificial light or heat ; no skylight, window, or other opening in the roof unprotected by wire gauze ; no unused chimney ; all openings within 15 ft. of the ground protected by doors and shutters of iron, or covered on outside with iron sheet.—*Insurance Agent*. [JUTE] [MILLS, FLAX.]

FLAXMAN, ARTHUR JOHN, Barrister-at-Law, pub. 1875: *The Law concerning the Registration of Births and Deaths in England and Wales, and at Sea ; being the whole Statute Law on the Subject. Edited, with Copious Explanatory Notes and References, and a full Index.*

FLEET.—In its most extended signification, this term is applied to a number of ships, pursuing in company either mercantile or warlike purposes, or both [CONVOY] ; but it is more generally confined to the different detachments which form the navy of any country, stationed in various parts of the world for the purposes of defence, aggression, protection, or intimidation. The term is also applied to tracts of land overflowed by tidal waters.

ESTUARIES.

FLEET MARRIAGES.—See MARRIAGES.

FLEET REGISTERS.—There was pub. by John Southerden Burn, in 1833; *The Fleet*

Registers: Comprising the Hist. of Fleet Marriages, and some Account of the Parsons and Marriage-House Keepers: with Extracts from the Regis.; to which is added Notices of the May Fair, Mint, and Savoy Chapels. And an Appendix relating to Parochial Regis. [REGISTRATION OF MARRIAGES.]

FLEETWOOD, EVERARD, pub. in 1731: *An Enquiry into the Customary Estates and Tenant-rights of those who hold Lands of Church and other Foundations by the Tenure of Three Lives and Twenty-one years, etc.* This pamph., which we shall speak of more at large under LEASES, was answered by Dr. Gallie in the same year. A question has been raised whether Fleetwood was not an assumed name, and whether the real author was not Mr. Burroughs, a Master in Chancery.

FLEMING, DR. J. G., M.D.—Medical Examiner of *Scottish Amicable*, pub. in 1862: *Medical Statistics of Life Assu.: being an Inquiry into the Causes of Death among the Members of the SCOTTISH AMICABLE Life Assu. So. from 1826 till 1860; and a Comparative Analysis of the Diseases which have proved fatal among the Assured in several Societies, and among the General Pop. of England.* This most excellent pub. we have spoken of and quoted from under various heads. [DISEASED LIVES.] [MORT. OBS.] [SCOTTISH AMICABLE, MORT. EXPERIENCE OF.]

FLEMING, G. A., JUN., was Sec. of *United Traders* in 1855 and later; of *National Mut.* in 1859; and was afterwards Chairman of the last-named Co.

FLEMMICH, M., of Antwerp, contributed to the *Assu. Mag.* [vol. ii. p. 72] a paper: *On the Assu. Cos. of Belgium*, which we have quoted under BELGIUM.

FLETCHER, A. P., Gen. Man. of *Northern* (F. and L.) and Act. of Life Depart. He was trained to the bus. of an accountant under Mr. A. Borthwick in Edin. In 1844 Mr. Fletcher became Sec. of the Co. at its Aberdeen office; in 1845 he accepted the position of accountant in same office; in 1846 he became Sec. of the Lond. office. Under Mr. Fletcher's able man. the office has grown into the front rank of solid Ins. Asso.

FLETCHER, BANISTER, was Sec. of *Preserver* F. and L. from 1857, and afterwards became its Manager.

FLETCHER, EDMUND, of Boston, U.S., pub. in that city in 1874: *Fletcher's Life Savings Ins. Plan.* [LIFE INS., HIST. OF.]

FLETCHER, JOSEPH (the late), Gov. Inspector of Brit. Schools, and one of the Ed. of the *Statistical Journ.* He contributed a series of papers to the *Statistical So.*, mostly on subjects outside our present inquiry. The following fall within our range:

1842.—*Abstract from a Regis. of Accidents in the Coal Mines of the Chamber and Werneth Co. at Oldham, during the Year ended Oct. 1841* (vol. v. p. 222).

1845.—*Historical and Statistical Account of the Present System of Supplying the Metropolis with Water* (vol. viii. p. 148). [WATER SUPPLY.]

FLETCHER, LAVINGTON E., for some years Chief Engineer to the Manchester Steam Users' Asso. He acted as one of the Assessors in the case of the explosion on board H. M. ship *Thunderer*, 1876.

FLEATHER, SIDNEY JAMES, was Sec. of *Sun Fire*, from 1860 down to 1873, when he retired. He had previously occupied various positions in the same office, advancing by steady steps to the highest. He entered the office in 1815, so that on his retirement he had 58 years of "active and honourable service" to look back upon. It rarely happens that a lifetime is spent in one office. The experience so attained is of the highest value.

In his evidence before the Select Parl. Committee on Fire Protection in 1867 he said (*inter alia*): I have had very great experience indeed not only in the settlement of losses by fire in our office, but in the sett. of losses by fire in other offices in which we have been jointly interested. I have also on many occasions acted as surveyor to the *Sun* Office in the absence of that officer, from death, illness, or other causes (1315). We always make considerable efforts to ascertain the origin of a fire; . . . but the result is often extremely unsatisfactory (1317). In two years 3814 fires occurred in which they were interested, irrespective of others where the loss would be below £5, and which were also numerous. This was in the U.K. alone. Out of those 3814 fires, 923 are marked "unascertained with regard to the cause"—that is, 24½ p.c. My impression, after giving a good deal of attention to the subject, is, that nearly one-third of the fires which occur are intentional, or the result of culpable carelessness (1319-26). The remedy, an immediate public inquiry, under authority (1314). It should be initiated by "anybody but the ins. offices—a public officer" (1348). The police officers have on many occasions given me very valuable assistance in tracing the origin of fires (1358). The number of fires in which we are interested has increased very considerably, and not only the number of fires, but the amount of loss involved (1351). It has increased out of proportion to the prems. received (1352). That is attributable to the increased number of incendiary fires and fraudulent claims (1353). I should imagine that the Coroner would be the proper officer unless an officer similar to that which exists in Scotland; I mean Procurator Fiscal (1360). He had very rarely heard of such engines as the *Extincteur* or *Annihilator* being used with any effect at the outbreak of a fire (1385). The hand-pump is found very useful indeed (1386). The investigations into causes of fires abroad are much more stringent than in this country (1444). "Yes; my experience is perhaps the largest of any man in London" (1450). I imagine about one-third of the property in

England is insured—I mean one-third of the property subject to destruction by fire. (1452). It may be one-half, perhaps (1453). I am satisfied that the number of fires in insured property is far greater than in uninsured property (1456). One-third of the fires are unsatisfactory in fact?—Very unsatisfactory (1459). I believe there are certain groups of individuals who get their livelihood by incendiarism, and the police would become acquainted with them if the inquiry was public, just as they are acquainted with the [other] thieves of London (1494).

Q.—Of course the ins. cos., if they chose, could watch the proceedings?—Yes (1500).

Q.—And they might take ulterior proceedings if they chose?—If they were interested, and it was a case which should be tried, I do not imagine that the ins. offices (I am sure about one) would shrink from their duty (1501).

Q.—Have you ever noticed any distinction in the number of fires when trade is good and when trade is bad?—That occurs continually. When there is a depression in any particular trade, then the fires in that particular trade commence. That is one of the points which satisfies me that many fires are intentional. If the cotton trade is depressed, mills and cotton warehouses are burnt down; and so with the hat trade, or shoe trade, if there is depression, fires immediately follow (1509).

Q.—That is a sort of fire barometer?—Decidedly; it is a well-known fact (1510). . . . Very many fires which are attributed to incendiarism in the country, I am satisfied are occasioned by the farmers themselves (1511). Private dwelling-houses are nearly on a par with what they used to be. Large mansions have been ascertained to be very bad risks (1520). [MANSIONS.] Commercial risks are worse than they used to be (1521). The reckless use of lucifer matches is something extraordinary (1556). "The conclusion at which I have arrived is that the number of fires which are now actually pending [1867], the origin of which I am perfectly satisfied were intentional, is far greater than ever occurred before in my experience" (1558). In the case of some of these intentional fires, the parties will not allow sufficient time to transpire to get their pol. made out before the place is burnt down. In very many instances the fire has occurred in a week, or in a fortnight after the ins. has been effected (1603).

Other portions of Mr. Fletcher's evidence are noticed under their appropriate heads.

FLETCHER, THOMAS C., was Act. and Sec. of *New Protector*, 1851.

FLIES.—The use of Flies in the economy of the universe may be manifold; but they appear to be chargeable with the function of transmitting disease; and in this sense they fall to be noticed here. Attention was drawn to the subject in 1863, in regard to a small fly, only 3 millimètres in length, known as the *Spotted Simulus*. This fly, believed to be entirely inoffensive under ordinary conditions, but which punctures like a mosquito, and becomes at times so numerous as to form a cloud around the suffering cattle, was then accused of causing, by its own venom, the fatal epizooty as it raged in the Canton of Condrieux, near Lyons. M. Tisserant, a veterinary professor, deputed to investigate the cause of the disease, and who promulgated the idea, saw but a part of the actual facts. "The fly had, doubtless, aided the development of the epizooty, but it was by carrying the virus which was the essential cause of the disease; the latter, in fact, being of a nature entirely pustulous, as was proved by the dissection of animals that died from its effects, and it is surprising it was so widely misunderstood."

In Oct. 1869, and March, 1870, Drs. Raimbert and Davaine each made a report to the French Academy detailing experiments; the former, on the one hand, claimed that flies which do not puncture, but have congregated on carrion, are those that communicate cattle disease by depositing virulent fluid on the healthy skin, which virus is absorbed by the pores! Dr. Davaine, on the contrary, maintained that these same flies could not transmit the disease except where wounds or sores existed; but he held that stinging flies are probably the ordinary agents of the transmission of such diseases. . . .

As a conclusion to the foregoing experiments and observations, Mégnin regards it as now demonstrated that certain blood-sucking flies, having a rigid, penetrating proboscis, like the *Stomox*, *Simulus*, and *Glossinus*, can, under certain conditions, become agents for the transmission of the virulent diseases, and amongst others, of the malignant pustule.

Again, at the Camp at Gravelle, where all the artillery corps of Vincennes, both men and horses, remained during 6 weeks of the months of Aug. and Sept. 1874, Mégnin noticed the *Stomox* fly feasting on the diseased fluids of a gangrenous erysipelas (from which a horse was suffering, consequent upon a severe kick upon the leg) with as much avidity as it would have enjoyed the warm blood of neighbouring healthy horses; he obtained voluminous ecthymia by inoculating horses in perfect health with the probosces of these gorged flies, such tubes, as proved by the microscope, being filled with a fluid swarming with the germs of putrid fermentation exactly similar to the sanies which oozed from the diseased horse. Direct inoculation with the erysipelatous pus produced a like result in propagating the disease, but experiments made by punctures with a bistoury produced no evil effect. —*Exchange and Review*, May, 1875.

FLOATING POL. (Fire).—A *Floating Policy* covers one or several kinds of goods, in several localities, under one sum, and one prem., for the same owner. Thus, a merchant may insure say £100,000 on merchandize in a number of docks and warehouses, the quantities of which may be changed and fluctuating from day to day, as removed by sales or

for consumption, and again replaced by further arrivals. The ins. floats with the varying circumstances of the risk.

If a merchant be fully insured under a "floater" when a fire arises, he will recover his loss in full; but all floating pol. issued in the U.K. are subject to *average*. [AVERAGE POL. (*Fire*).] In the U.S. the insertion of the average clause is optional; and the underwriter is not unfrequently prejudiced in consequence.

The difference between "general pol." or a "blanket pol." and a floater of the ordinary class is that the latter covers in several localities, while either of the former cover several items in one locality only. But this distinction must be accepted subject to what follows hereafter.

A floating pol. may by its conditions be confined to actual values in excess of the specific ins. which may be existing at the time on any of the property under its protection. Its object usually is to cover any deficiency that may chance to arise in the amount of specific ins. at the time of the occurrence of a loss in any of the localities under the protection of the pol. But it may, in the absence of careful limitation, have a very much more extended range of operation.

The following is the ordinary form of contract in a floating pol. issued in the U.K.; the pol. only extending to the localities named therein:

On [Merchandise] the insured's own, in trust or commission, for which he is responsible (in no case exceeding the market value of the goods immediately anterior to the Fire) in or on all or any of the Warehouses, Vaults, Cellars, Sheds, Cranhouses, Wharves, Yards, or Quays, and (if not under protection of a Marine pol.) on board any vessel or craft within the limits of the . . . Docks, and in all or any of the Up-Town Warehouses belonging to the said Dock Co. in the Port of London, subject to the Conditions of Average hereinafter mentioned.

The conditions of average referred to have already been given under AVERAGE POL. (*Fire*). There is, however, a further condition indorsed on the pol. as follows:

If at the time of any loss or damage by fire happening to any property hereby insured, there be any other subsisting ins. or insurances, whether effected by the insured or by any other person, covering the same property, this Co. shall not be liable to pay or contribute in respect of such loss or damage more than its rateable proportion of such loss or damage.

This condition we venture to think is calculated in some measure to conflict with the intention of the "excess clause," which is No. 2 of the average conditions already referred to. The time will prob. come when a more definite pol. for use under the London Mercantile Tariff will be adopted. The now pending decision (on appeal) regarding ins. in force on the grain in the "King and Queen" Granaries (1871) will probably render this necessary. The clauses in the mercantile pol. in use in N.Y. (given hereafter) appear more distinct than our own.

Remarking upon the conflict which the several clauses and conditions of the same pol. present in this regard, Mr. Richard Atkins, in his useful little book, *The Average Clause* (pub. 1866), said, p. 44:

Upon what principle is it that the Co. issuing an average pol. inserts a clause declaring that the specific pol. is bound to settle first, and abandon its own condition of paying only *pro rata*—thus furnishing the spectacle of one office practically annulling, by its own act, the conditions of another Co.? . . . It is not difficult to discern the reason for treating such varied pol. when issued by one co. in the manner prescribed; but no better reason can be assigned for office A allowing office S to annul the conditions of its pol. in the manner referred to, than the intention which A has to return the compliment in kind at the first opportunity which may present itself.

He has perhaps found the real solution in the following (p. 44):

The rule prob. had its origin in the purpose of regulating losses where different kinds of pol. exist in the same office. This has been taken up and misapplied in the cases where such varied form of pol. exist in different cos.

Mr. Griswold, who has written more clearly upon this subject than any other writer, says in his *Fire Underwriter's Text-Book* (p. 132):

In England, floaters are recognized as *excess* pol. when in contact with specific ins., only by tacit consent of the cos. The contribution clause contained in all of the pol. specific or average is lost sight of to give effect to the *excess clause* which is found only in the latter: thus presenting the anomaly of an equitably and universally recognized condition of all pol. being thrust aside to give place, to say the least of it, to an unjust special one, found only in one class of pol.

He adds:

In this country, under the forms of pol. in use here, this arbitrary rule, by some misnamed the *Albany Rule* (FIRE INS. LOSSES, APPORTIONMENT OF), though occasionally acted upon, when found to operate in the interest of the adjuster's Co., and the claimant will submit to its enforcement, has no legal or moral force or application in adjustments. On the contrary, it is not only unjust and inequitable in its operation, but it is directly opposed to the uniform ruling of our courts.

We differ from Mr. Griswold on the point of *principle*. We believe that the true intent of floating fire pol. is, and should be, to cover only such loss as is in excess of all specific pol., which latter must, in other words, be exhausted, in all the offices ranking as co-insurers, before the floaters can come into play. If this view be upheld by the English Courts, the sooner the pol. are legally shaped to express their intention, the better for all concerned.

We now turn to the form of contract in use in the U.S. mercantile pol.—taking that of N.Y. as a type of them all:

On merchandise hazardous, not hazardous, and extra hazardous, their own, or held by them in trust or on commission, or on joint account with others, or sold but not delivered, in all or any of the brick or stone warehouses, or in or on any of the streets, yards or wharves, and while in transit, in

the cities of New York, Brooklyn, and Jersey City, and unless under the protection of a marine pol., in any ship or vessel in the ports of said cities, subject to the average clause annexed [same as condition of average in English pol.]

It is at the same time agreed that if any specific parcel of goods included in the terms of this pol., or such goods in any specified building or buildings, place or places, within the limits of this ins., shall at the time of any fire be insured in this or any other office, this pol. shall not extend to cover the same, excepting only as far as relates to any *excess of value* beyond the amount of such specific ins. or insurances, which said excess is so declared to be under the protection of this pol. and subject to average aforesaid.

Here, by the operation of this "excess clause," the scope of a floating pol. in the U.S. is definite, and capable of being easily understood. Mr. Griswold says hereon :

The object of a floating pol., like the general [GENERAL POL. (Fire)] is to cover any deficiency that may chance to arise in the amount of specific ins. at the time of the occurrence of a loss in any of the localities under the protection of the pol. It may be said to *float over the entire property covered*, ready at any moment to drop in that locality where, by reason of loss, its presence may be required to make the indemnity complete.

When it contains the excess clause above cited, the intention is to confine the liability under the pol. to only such excess of value as is beyond any *specific* ins. as may exist upon a part or all of the property in any of the specified localities embraced within the range of the pol.; *which specific ins. must be first exhausted in payment of any loss, before the floater, under its terms, can be called upon to contribute*. But should loss occur to any of the property under its protection in *excess of the specific ins.* thereon, it will be held to contribute its rateable proportion of the loss upon such *excess of value* (not excess of loss) over the amount of specific ins., to the extent of its liability, as the correct adjustment may require.

Without the "excess clause," the floater becomes a general or blanket pol., and liable to contribute with co-insurers *pro rata*; subject, however, to the conditions of average, if inserted. Should there be no specific co-ins. within the range of the floater, it then becomes *specific itself*, and liable to its full extent for any and all losses upon any of the property covered by it, subject to average, however, if the condition is inserted.

Floater, when made excess pol. *by their own conditions only*, do not thereby escape the operation of the contribution clause, when found in connexion with other co-insuring pol. Like the excess pol., the existence of the excess clause must be specifically recognized and consented to in the co-insuring pol. upon any portion of the risks within the range of the floater; otherwise, as between the assured and the co-insuring pol., such floater will be held in the adjustment as "other ins." and liable to contribution to its full extent upon any or all of its concurrent items; its terms and conditions to the contrary notwithstanding—they being operative only between the Co. and its pol.-holder; for no Co. can, *by its own conditions*, practically annul and override those of another Co. *In case of a partial loss* falling within the amount of specific ins., the floater covering only the *excess of value* above the specific ins., would escape scot free, and leave the pol.-holder liable as co-insurer with the specific pol. in its stead.

The nature and operation of floating pol. in the U.S. seem therefore clear and well defined.

Floating pol. have become almost a necessity having regard to the commercial usages of great maritime cities. That they do, in their operations, run riot to "prudent limits," and the "wise distribution of risks," was proved at the Tooley-street Fire in 1861, and in other cases before and since. In the instances of tallow, cotton, tea, and other articles of merchandize of considerable bulk in relation to value, the limit of risk in any one dock or warehouse is the limit of capacity of the building; but in the case of silk and some other products of small bulk and great value, no such element of natural protection comes in; and knowledge based on experience can alone regulate the risk to be undertaken in such instances.

Regarding the law of the subject there are only a few cases reported which reach the points involved.

In *Nicolet v. Ins. Co.* [sic], before the U.S. Courts in 1831, the facts were these. The plaintiff had insured "20,000 dol. on cotton that might be stored in 7 different places." Cotton to the value of 17,000 dol. was burned at one place, and at the same time cotton belonging to assured was stored in other places, making in all more than 20,000 dol.:—*Held*, that assured was entitled to recover the full sum lost, and not an average sum proportioned to the sum insured, as compared with the whole property at risk. (3 La. 371.)

In *Rex v. Mutual Ins. Co.*, before the U.S. Courts in 1849, the facts were these: Ins. was effected on plts. house, 1200 dol.; furniture therein 250 dol.; on his barn and shed on the meadow 250 dol.; and on his hay and grain therein 400 dol. Hay and grain in the barn on the meadow were consumed by fire to an amount exceeding 400 dol.:—*Held*, that plt. was entitled to recover to the amount of 400 dol.; no matter whether the pol. be constructed to cover hay and grain in all the buildings, or only the hay and grain in the barn on the meadow. Supposing the ins. to cover the hay and grain in all the buildings, there is no principle of construction by which the sum insured on all the hay and grain can be apportioned to the different parcels: so that no greater sum can be recovered for the loss in this case, than a sum that shall bear the same ratio to 400 dol. as the value of the hay and grain in the barn on the meadow bears to the value of all the hay and grain in all the buildings named. (20 N.H. 198.)

In *Mauger v. Holyoke Mut. Fire*, before the U.S. Courts 1873, the point was really whether there was a double ins. (3 Ins. Law Journ. 55.)

In the case of *Strohn v. Hartford Fire Ins. Co.*, before the Supreme Court of Wisconsin, 1874, there had been a verbal agreement for ins. "to said H. N. Comstock, for the benefit of himself and others having tobacco in store and to be stored in his warehouse." This contract the Co. admitted, but contended that the language in the written pol. which would have been executed and delivered to Comstock would have been "on tobacco

owned and held in store by him." The plaintiff further asserted that it was also agreed "to add to, or take from the amounts insured in said pol. as the stock of tobacco in store should increase or diminish, at the option of the said H. N. Comstock and other parties interested." The Company contended that the insurance was to extend to no other property than that owned and held individually by the warehouseman. The Court held—1. That the agreement to add to or take from the amounts insured by the pol. was a mere executory oral agreement, having reference to a future pol. which was never issued; and that an agreement to issue a floating pol. cannot conflict with the verbal agreement previously made with the insured, but is rather in harmony with it. 2. That goods "held in store" ought to be construed to embrace the property of others kept in the warehouse at the time of the fire. 3. That the words "held in store" are of sufficiently ambiguous or doubtful import to let in intrinsic evidence of their meaning, and what the parties intended by them; and that this will apply in ascertaining what would have been the language of the pol. had it been written. 4. That the warehouseman (C) had a right to maintain an action for the amount of the ins. on behalf of the trustee. 5. That in a case where the distinct interests of the several owners of the property were not expressly stated, only one action should be brought to settle any action under it; thus confirming decision of Court below. (3 *Ins. Law Journ.* 288.)

In *North British and Mercantile Ins. Co. v. Liverpool and London and Globe*, before the British Courts, 1876, arising out of the insurances specific and floating on grain in the "King and Queen" Granaries, etc., which was burned in 1871, the several ins. cos. interested in the fire had paid the entire losses, and now sought the direction of the Court in regard to the apportionment of such loss under the several pol. The Master of the Rolls held, that the specific pol. must be exhausted before the floaters are called upon to contribute. This decision is now under appeal.

[AVERAGE POL. (Fire).] [BLANKET POL.] [CO-INSURANCES.] [COLLECTIVE POL. (Fire).] [CONCURRENT POL. (Fire).] [DOUBLE INS.] [EXCESS CLAUSE, S.] [EXCESS POL.] [FIRE INS., HIST. OF, 1864.] [FIRE INS. POL., COMPOUND.] [GENERAL POL. (Fire).] [INDEPENDENT LIABILITY CLAUSE.] [NON-CONCURRENT POL. (Fire).] [PRO RATA CLAUSE (Fire).] [SELF INS. (Fire).] [SPECIFIC POL. (Fire).]

FLOATING POL. (Fire), CERTIFIED.—A "certified floater" is a floating pol. on goods in warehouse duly certified by the proper official as suitable for its purpose.—*Ins. Agent.*
FLOATING POL. (Fire), PREMS. FOR.—We have no means of ascertaining when the practice of issuing Floating Fire Pol. first commenced; but it was probably early in the present century.

1832.—Mr. F. G. Smith, in his *Practical Remarks on the Present State of Fire Ins. Bus.*, etc., said regarding floating pol. at that period:

The ready manner in which ins. of this description are taken by English cos. at 1s. 6d. p.c. has prevented the application of this rate of 2s. 6d. in every case by the Scots offices, although fully convinced of the inadequacy of anything less. The more I reflect upon the rates charged for some risks, the more I am surprised; and amongst them I may rank floating ins.

Ins. bus. now-a-days is often done with so little thought or consideration, that in many cases the adequacy of the prem. is never thought on. The risk in question is undoubtedly one of these; for surely if at all considered it would not be gone into at 1s. 6d. p.c. It is true there is the average clause; but what of that? Leaving that out of the question, I will ask, is the risk not more than a private dwelling-house in a good situation? Here is property insured in all or any of ten or a dozen warehouses or other buildings within a range of 10 or more miles;—warehouses, in all likelihood, of the localities of which the office insuring is in ignorance, and which although strictly speaking not hazardous internally by the depositing of hazardous goods, yet may be (and in many cases are) so situated externally, as to be highly hazardous and bad risks. I know of bonded warehouses this moment, in which many offices are concerned to a great extent, insured at one quarter the rate which should be paid; one in particular, adjoining a risk paying a guinea p.c.; and there are very many contemplated by floating pol. which are so connected with hazardous risks as to be endangered thereby.

This plain writing was useful at the time.

1858.—The rate for "floaters" gradually increased from the date last named up to 1858, when it stood at 10s. p.c.; or 12s. 6d. "including carriers."

1861.—The rate for Lond. Mercantile Ins. went up and down again this year, under the circumstances stated under FIRE INS. PREMS. at this date.

1876.—The rate at the present date ranges from 3s. to 4s. 6d., subject to the regulations of the Tariff.

FLOATING POPULATION.—Here the term "floating" is used in its ordinary sense. According to the English Census returns for 1871, there were 10,976 persons enumerated in barges and boats on inland waters. In 1861 the number so enumerated was 11,915; in 1851, 12,562. The number ordinarily living in this manner was estimated in 1871 to be 29,500; the number given above being the number actually afloat on the night of the census. In a discussion which arose upon the subject in the *Times* in the autumn of 1874, the number was stated, by those having some special knowledge of the subject, to be nearer 100,000, vide Mr. Geo. Smith's letter in the *Times*, 2 Nov. 1874. [MARITIME POP.]

FLOCCITATIO [Carphologia], literally "Picking the bed-clothes."—An alarming symptom in many acute diseases,—a forerunner of death. Dame Quickly, "the Hostess," says of Falstaff, "After I saw him fumble with the sheets and play with flowers and smile upon his fingers' ends, I knew there was but one way. . ."

FLOODS, INS. AGAINST.—The Saxon Gilds insured their members against loss from Fire, Water, Robbery or other calamity. The damage by "water" there contemplated was most likely that arising from floods, *i.e.* excess of rain combined with inefficient facilities for its passing away. Damage from "inundations"—which is altogether a different risk usually—was prob. at this early period almost unknown. *Inundations* arise from the giving way of sea-walls, or the banks of dykes and rivers—appliances of a later civilization. They may, indeed, occur in consequence of volcanic disturbances; or as the result of cyclones, hurricanes and other great disturbances of the atmosphere acting upon the sea, and producing extraordinary "Tidal Waves," as has been the case in the West India Islands on several occasions, and quite recently (1876) in Bengal.

The only systematic development of Flood Ins. of which we have any knowledge has originated and is still practised in *France*. The system has, we believe, been extended to *Italy*, and prob. to *Austria*.

1859.—M. le Hir pub. in Paris a pamph.: *On Ins. in France against Hail, Frost, Inundations and Mort. of Cattle*, wherein he furnished statistics of a very complete character regarding each of these branches of bus. under circumstances which will be stated elsewhere. [*FRANCE, Agricultural Ins.*] Regarding *Floods* he speaks of the heavy losses which the towns and lands bordering upon the great rivers in France had sustained in 1840, again in 1846, and still worse in 1856 [the details will be given under **FLOODS, STATISTICS OF**]; "whilst in some years they do not exceed 3, 4, or 5 millions of francs [£120,000 to £200,000] damage."

He then proceeds to consider the subject of Floods [*Inundations* is the term he employs] from an ins. point of view: There is no occasion to defend the topographical distribution of this kind of risk. It is evident that the more frequently a commune has been subjected to inundation, the more liable it will be to a recurrence of the event. But the classification in communes is not of itself sufficient, since in those most liable to inundations there are localities which by their elevation are altogether, or almost, free from its effects. The localities which are entirely free may be considered as not likely to be brought within the limits of ins. As to those parts which are most exposed, it must be left to the judgment of the committee for the arrondissement, or of the gen. man., to class them according to their situations: 1, 2, or 3 degrees or more, below the average of the whole commune.

The following T. exhibits at once the classification proposed in regard to the frequency of, or entire absence from, Floods; and also the rates of prem. for the different hazards in regard to probability of damage:

Number of Communes which had been flooded from 1826 to end of 1851.	1	2	3	4	5	6	7	8	9	10	11	12
	Communes not suffered once	twice	three times	four times	five times	six times	seven times	eight times	nine times	ten times	eleven times	or more
—	5344	2105	1008	591	358	342	158	87	48	23	46	
CLASS												
I. Lands, plains, meadows, etc., washed away or destroyed	'01	'03	'04	'05	'06	'07	'08	'09	'10	'11	'12	'13
II. Forest, trees, hedges, and cut wood	'02	'06	'08	'10	'12	'14	'16	'18	'20	'22	'24	'26
III. Buildings, houses, enclosures, walls, etc.	'03	'09	'12	'15	'18	'21	'24	'27	'30	'33	'36	'39
IV. Borders of rivers and canals, dykes, constructions in rivers connected with rivers and boats	'04	'12	'16	'20	'24	'28	'32	'36	'40	'44	'48	'52
V. Constructions floating on rivers, or built on piles therein	'05	'15	'20	'25	'30	'35	'40	'45	'50	'55	'60	'65
VI. Herbage and harvests, natural or artificial meadows, plants used for fodder which are not in general destroyed by inundation till nearly ripe (except plants grown for seed).	'06	'18	'24	'30	'36	'42	'48	'54	'60	'66	'72	'78
VII. Furniture, clothing, movable effects, or movable farm utensils	'07	'21	'28	'35	'42	'49	'56	'63	'70	'77	'84	'91
VIII. Cattle, horses, poultry, etc., in farm yard or stables	'08	'22	'34	'40	'48	'56	'64	'72	'80	'88	'96	'104
IX. Harvests in barns—provisions and merchandize not easily removed, and likely to be entirely destroyed by inundation	'10	'30	'40	'50	'60	'70	'80	'90	'100	'110	'120	'130
X. Vines, orchard trees and shrubs	'12	'40	'60	'80	'100	'120	'140	'160	'180	'200	'220	'240
XI. Other products—cereal crops, rape seed, marsh products, garden crops, etc.	'16	'60	'90	'120	'150	'180	'210	'240	'270	'300	'330	'360

The figures in the preceding cols. represent the number of communes exposed to the risk of inundation in each year from 1826 to the end of 1851, forming a total of 10,010 communes. Several of these communes had been entirely inundated; others only partially. From these data he endeavoured to ascertain what portion of the property of

France, fixed or movable, was subject to injury from floods. The following summary is the result. The first two cols. give by approximation the quantity and value of insurable property; and the third the contribution equivalent to each class of value if it was situate in a commune only once affected. This proportion has been taken as being rather below the real average, since out of 10,010 communes, 5344 were affected but once. Since 1851 the number of losses by inundation had increased. The fourth col. shows the total contributions for values insured. We render the values in English in each col.

CLASS.	£	at p.c.	£
I. Superficial products liable to be washed away (the value of cultivated lands in France was then estimated at 60 milliards of fr.)	80,000,000	'03	24,000
II. Woods (the revenue of France in woods was in 1841, 200 millions of fr., or a cap. of 5 milliards).....	7,200,000	'06	4,320
III. Buildings	74,000,000	'09	76,600
IV. Borders of rivers	4,000,000	'12	4,800
V. Floating buildings	320,000	'15	430
VI. Grass, hay (the green crops and hay of France were estimated in 1841 at 900 millions of fr.).....	8,000,000	'15	14,400
VII. Furniture, clothing (for the whole of France they were at least 10 milliards of fr.).....	12,480,000	'21	26,208
VIII. Cattle.....	10,000,000	'24	24,000
IX. Harvests housed, merchandize (the harvests housed in all France were then worth about 6 milliards of fr.; merchandize at least as much).....	80,000,000	'30	240,000
X. Vines (the vines were worth, for all France, according to the statistics of 1841, 400 millions of fr.)	4,000,000	'40	16,000
XI. Cereal and other products (for all France valued at 4 millions of fr.)	40,000,000	'60	240,000
Totals.....	320,000,000		660,808

According to these statistics, the contributions for ins. against floods would produce £660,808 ann.; but considering that there is a much higher value affected twice and upwards than that which has never suffered at all, this value should be raised to at least £760,000; from which, deducting £160,000 for charges of administration of 8 milliards (£320,000,000) at 10 centimes, there would remain 15 millions (£600,000) as a sufficient sum to meet the annual risks and costs of the So.

According to the statistical returns, the actual average of losses by floods from 1826 to 1851 was 11,284,493 fr. (about £451,380); and even this is considered an exaggerated statement. The floods of 1856, which caused losses amounting to about 140 millions of fr. (£5,600,000), had greatly augmented this average; but would not prob. bring it above 15 millions of fr. (£600,000), vide *Assu. Mag.* vol. viii. p. 295.

Ins. against Floods had not previously to that date been practised in France. We shall recur to the subject under FRANCE.

1874.—The *British, Colonial, and Foreign Property Ins. Corp.*, founded this year, proposed among its "objects" to ins. "against loss or damage occasioned by water." In its prosp. it was stated that the Corp. would "include in its operations the making good of damage caused by Explosions, Inundations, Floods, Leakages, and otherwise by the action of air, water, or explosive matter." It also spoke of "the Floods in the North of England, which have caused an enormous destruction of property hitherto unprotected by ins." The project fell through at an early stage, never having developed this branch of its bus.

Any system of Flood Ins. should reach the protection of merchandize stored in cellars, from which parts of London have suffered so much of late years.

On several occasions within the last ten years the subject of Flood Ins. has been mooted in the U.K. That it appears to be becoming a necessity is clear. The extensive drainage of the lands on the higher levels has had a natural tendency to bring the surface (as indeed the subsoil) waters down into the valleys much more rapidly than they could come under the old system of slow percolation. The levelling of hedge-rows and filling of ditches has, too, lessened the number of receptacles. The storm waters, as a consequence, rush down into the valleys; and floods become more prevalent. We have been applied to for tables of prem. for Flood Ins.; but where is the data to be obtained? We have, with all our elaborate machinery of Gov., no department in which useful statistics, such as those readily obtained in France, are compiled. The ignorant prejudices, alike of landlords and tenants, prevent us from having a Department of Agriculture. The necessary facts, then, on which to base operations, can only be obtained by individual enterprise. We have commenced the compilation of a register of localities periodically subjected to floods. The preceding T. show the kind of information required. The facts in the following art. are but a contribution from a large, but incomplete, mass of data. [FRANCE.]

FLOODS, TABLE OF.—In view of the possible development of a system of Flood Ins. in the U.K. or in the U.S., it seems desirable to put on record some of the leading incidents which have occurred in this connexion, that they may be available for ready reference.

It may be remarked that besides the direct loss of life and property resulting from floods, there is a great indirect loss—the consequence of disease induced by malaria, famine, etc. In these last respects many of the details given fall within the range of Vital Statistics.

Table of the principal recorded Floods and Inundations of the World.

B.C. Date not fixed.	
	The <i>Deluge</i> , the first mention of which occurs in Gen. iv. 7–22, where is described the directions received by Noah relative to the construction of the Ark. The commencement of the Flood is related in Gen. vii. 10–12. The waters increased for 40 days (v. 17), and remained upon the earth 150 days (v. 24), at the end of which time the Ark rested on the mountain of Ararat (Gen. viii. 4). This was regarded by the narrators of the event as a general deluge—a fact now very much doubted on scientific grounds. The date of the occurrence ranges according to the estimates of different authorities from B.C. 3246 down to B.C. 2104.—Townsend's <i>Dict. of Dates</i> .
1760	<i>Attica</i> (Greece). A flood known as the Deluge of Ogyges. It was occasioned by the sea being driven in by winds, and is sometimes spoken of as the "Second Deluge." (B.C. 1504.)
1504	<i>Deucalion</i> (Greece). Great flood from rain, which extended all through Thessaly. It is sometimes spoken of as the "Third Deluge." (B.C. 1760.)
322	<i>Ephesus</i> (Asia Minor) was destroyed by an inundation. Rebuilt on a more elevated site B.C. 300.
241	<i>Rome</i> . The overflowing of the Tiber is said to have swept away all the houses and buildings in the lower part of the city. The river overflowed again B.C. 54 and 27. (See A.D. 15.)
A.D. 7	<i>England</i> . Great flood in valley of Thames; many persons drowned, and cattle destroyed.
9	<i>England</i> . Great overflow of Humber, flooding the country all round.
14	<i>England</i> . Overflow of Severn; great damage.
15	<i>Rome</i> . The Tiber again overflowed, and did such serious damage that it was proposed in the Senate to diminish its waters by diverting some of the chief tributaries. (B.C. 241.)
29	<i>England</i> . Great overflow of the Trent.
33	<i>England</i> . Overflow of the Dee; great damage done to Chester.
37	<i>England</i> . Medway overflowed, and drowned many cattle.
48	<i>England</i> . The Thames overflowed, the waters extending through four counties; 10,000 people drowned, and much damage to property.
68	<i>England</i> . Volcanic eruption followed by inundation of sea. Isle of Wight separated from Hampshire.
80	<i>England</i> . Great overflow of the Severn, many people and much cattle drowned.
86	<i>England</i> . Great overflow of the Medway. Loss of life.
95	<i>England</i> . Humber overflowed; damage extended over 50 miles of country.
115	<i>England</i> . The Severn again overflowed; loss of life and cattle.
131	<i>Dorsetshire</i> (England). Inundation of the sea, which came 20 miles inland. Great loss of life and property.
155	<i>Edinburgh</i> (Scotland). Considerable damage from flood.
214	<i>England</i> . Trent valley overflowed. Great destruction.
218	<i>Northumberland</i> . Great flood in Tweed; much damage.
245	<i>Lincolnshire</i> . An eruption of the sea laid under water many thousand acres.— <i>Camden</i> .
268	<i>England</i> . The Humber overflowed and did great damage.
317	<i>Isle of Thanet</i> (Kent). Flooded. Loss of life and property.
352	<i>England</i> . Severn valley flooded; great loss.
358	<i>Cheshire</i> (England). Inundation from the sea; several thousands of people drowned, and much damage.
365	<i>Egypt</i> . An inundation consequent upon an earthquake destroyed many of the inhabitants.
368	<i>Sicily</i> . Inundation from sea; great destruction.
387	<i>Cheshire</i> . Overflowing of the Dee and great destruction.
393	<i>Egypt</i> . Unusual overflow of Nile; great damage.
419	<i>Southampton</i> . Inundation of sea and great destruction.
441	<i>Wales</i> . The sea made great inroads, both N. and S., many people and much cattle drowned.
469	<i>Constantinople</i> . Much flooded, consequent upon 4 days' incessant rain.
479	<i>London</i> . The Thames for many miles above and below much flooded; great damage.
487	<i>England</i> . The Severn valley again overflowed; great damage.
525	<i>England</i> . The Trent overflowed. Great number of cattle drowned.
"	<i>Edessa</i> (Mesopotamia), sometimes called "Antioch of the Fair Streams." A destructive flood did considerable damage to the city.

529	<i>England.</i> The Humber overflowed. Many people and cattle drowned.
536	<i>Northumberland.</i> The Tweed again overflowed. People and cattle drowned.
540	<i>France and Italy.</i> Great floods from rains.
552	<i>Greece.</i> Inundation from the sea; part submerged.
553	<i>Scotland.</i> Violent rain storms extending over 5 months.
564	<i>England.</i> Great rain floods.
570	<i>Italy.</i> Great rains and floods.
575	<i>England.</i> Parts of Essex, Suffolk, and Norfolk inundated from the sea.
579	<i>France and Italy.</i> Great rains and floods.
580	<i>Anglesea</i> (Wales). Much damaged by the sea.
590	<i>Italy.</i> Great floods from tempest; followed by plague.
634	<i>Ireland.</i> Floods in Munster.
649	<i>Cheshire and Lancashire</i> (England). Greatly damaged by inundations of sea.
669	<i>Kent</i> (England). The Medway overflowed; great damage.
685	<i>Ireland.</i> Great inundation from the sea.
690	<i>Italy, Venice, Liguria.</i> Great floods from violent rain storms.
693	<i>Ireland.</i> Floods of rain in Leinster.
717	<i>Rome.</i> The Tiber greatly overflowed from rains.
719	<i>Ireland.</i> A rainy summer; great inundations of the sea.
730	<i>Edinburgh</i> (Scotland). Great damage by rain.
738	<i>Glasgow.</i> Great floods; more than 400 families drowned. [Some authorities give the date 758.]
776	<i>Ireland.</i> Great fall of rain, and consequent floods.
785	<i>Ireland.</i> "A flood in Darinis."
788	<i>Italy.</i> The Tiber much flooded by rains.
813	<i>England.</i> Great overflow of the Severn; 2000 people and 7000 cattle drowned.
818 or 820	<i>France.</i> Great rains and floods.
834	<i>Northumberland.</i> Tweed overflowed and extended 30 miles round. Loss of life and cattle.
840	<i>Germany.</i> The Rhine flooded from rains.
856	<i>England.</i> Great rains and floods, followed by epidemic of quinsy.
861	<i>Kent</i> (England). Floods in Medway. Great loss of cattle.
864	<i>England.</i> The Humber again greatly flooded.
876	<i>Saxony.</i> Great rains in June. Extended damage.
885	<i>Cheshire.</i> The Dee greatly overflowed; many villages injured.
912	<i>Saxony.</i> Flooded by rain, "after a comet."
918	<i>Scotland.</i> Rains extending over 5 months; consequent floods.
"	<i>Ireland.</i> A great flood.
935	<i>Southampton.</i> Great floods; many people drowned.
942	<i>England.</i> Dec. Great rains and floods, "after comet in Nov."
"	<i>Ireland.</i> Great flood of the Shannon.
952	<i>Bagdad</i> (Asiatic Turkey). Half the city inundated from great overflow of the Euphrates.
959	<i>Bagdad.</i> Nearly three-fourths of the city inundated from a serious overflow of the Euphrates.
968	<i>Persian Gulf.</i> Severe irruption following earthquake. Several cities destroyed, and new islands formed.
973	<i>England.</i> Thames greatly overflowed; many people drowned.
989	<i>England.</i> Floods all the winter.
1012	<i>England and Germany.</i> Great inundations of the sea.
1013	<i>England.</i> Earthquake, floods, thunder, lightning, hurricane.
1014	<i>England.</i> Great inundations of the English coasts; "a number of seaport towns demolished."
1016	<i>Ireland.</i> Excessive rains and floods—producing cattle mortality.
1020	<i>England.</i> Great floods followed by plague.
1031	<i>England.</i> Extended general floods from rains.
1040	<i>Germany.</i> Great floods.
1045	<i>Flanders.</i> Inundations from the sea.
1046	<i>Severn Valley</i> (England). Great rain floods; loss of cattle.
1076	<i>Bagdad.</i> The Tigris overflowed and inundated Bagdad.
1086	<i>England.</i> Heavy floods from rain.
1088	<i>Bagdad.</i> The Tigris again overflowed and did much damage.
1090	<i>Constantinople.</i> Great floods.
1093	<i>Ireland.</i> "Great rains and inundations in summer and autumn."
"	<i>England.</i> Great floods, and afterwards severe frost.
1094	<i>Ireland.</i> "Great inundations in all Ireland."
1098 or (1100)	<i>English Chann'd.</i> Earl Godwin's lands, exceeding 4000 acres, overflowed by the sea, and an immense sand-bank formed on the coast of Kent, now known as the Godwin Sands.— <i>Camden.</i>

1099	<i>England.</i> Rains and sea floods, "fatal to much people and cattle." Thames much flooded on festival of St. Martin.
1100	<i>Flanders.</i> A terrible inundation forced many of the inhabitants to leave the country. Some settled in England. Nearly the whole of this country is
or	believed to have been covered by the sea in early times. On this occasion
(1108)	the town of Ostend was immersed.
1105	<i>England.</i> Great floods, followed by famine.
1106	<i>England.</i> Inundation from the sea.
1118 or 19	<i>England.</i> Constant floods all the year; "no corn sown or reaped."
1125	<i>England.</i> Great flood on St. Lawrence's Day.
1133	<i>France.</i> Great floods from rain.
1134	<i>Flanders.</i> Inundation from the sea.
1152	<i>Germany.</i> Great floods on the Rhine from rains.
1156	<i>England.</i> Rain floods, lasting all the harvest.
1157 or 8	<i>Italy.</i> Great overflow of the Tiber. <i>Normandy.</i> Great floods.
1161	<i>Sicily.</i> Inundation of the sea; drowned 5000 persons; "floods in many rivers, multitudes of people lost." (1165.)
1162	<i>Holland.</i> Inundation from the sea; many people and cattle lost.
1165	<i>Sicily.</i> Irruption of the sea; 12,000 people drowned. (1161.)
1170	<i>Holland, Friesland, and Utrecht.</i> Terrific flood. In the latter province the water rose to so great a height that the people were able to catch fish with nets within the walls of the town.— <i>Davies' Holland.</i>
1171	<i>England.</i> Inundation of the sea; harvest destroyed in many places.
1172	<i>Ireland.</i> "Great floods destroyed numbers of men."
"	<i>Germany.</i> Great floods on the Rhine.
1173	<i>Holland.</i> Great flood [? inundation] which considerably extended the limits of the Zuyder-zee.
1176	<i>Lincolnshire (England).</i> Inundation from the sea; also in <i>Holland.</i>
1179	<i>England.</i> "Many floods from a moist severe winter."— <i>Short.</i>
1187	<i>England.</i> Great floods.
1188	<i>England.</i> Inundations of sea "killed very much people and cattle."
1196	<i>England.</i> Great floods in March from rains.
1199	<i>England.</i> Serious floods from rain.
1208	<i>France.</i> Terrible rains, and great floods, destroying bridges, houses, etc.
Dec.	"Greatest ever seen in France."— <i>Short.</i>
1209	<i>England.</i> Great floods on St. Nicholas Eve, "after a tempest of thunder and lightning."
1210	<i>Perth (Scotland).</i> Great flood from overflow of Tay and Anan Rivers; many
or	houses washed down and people drowned. The King lost his youngest
1212	son and nurse in it; and 12 of the Court ladies were drowned. The King and his brother with great difficulty escaped in a boat.
1212	<i>Sicily.</i> Inundation from the sea, "thousands of people swept away by it."
1218	<i>England.</i> Great floods in the night in winter.
1219	<i>Nordland (Norway).</i> "The St. Lawrence Lake broke out and drowned
Oct.	36,000 people, besides cattle."
1220	<i>Poland.</i> Floods from constant rains.
1222	<i>England.</i> High tides; great damage. Also continuous rain storms.
1228	<i>Friesland.</i> Irruption of the sea, 100,000 people drowned.
1230	<i>Italy and France.</i> Great overflow of the Tiber; floods in France.
1232	<i>Austria.</i> Great overflow of the Danube.
1240	<i>England.</i> The Thames greatly flooded from rains.
1247-50	<i>England.</i> Several inundations of the sea; great losses.
1251	<i>England.</i> Tides rise 6 ft. higher than usual.
"	<i>Ireland.</i> June 29. Great inundation of the Shannon.
1257	<i>England.</i> July. Great floods from rains.
1260	<i>Germany.</i> Great floods on the Rhine.
1266	<i>Scotland.</i> Great inundations of the Tay and Forth from the sea.
1269	<i>England.</i> Feb. Great floods from thaw.
1276	<i>England.</i> Great floods from the sea, and from rains.
1276	<i>Bagdad.</i> The city again inundated after appearance of red flame [? comet].
1278	<i>Italy.</i> Great overflowing of the Tiber.
1280	<i>England.</i> Great floods all the summer; especially in August.
[? 1287]	<i>Winchelsea (England).</i> Great inundation of the sea; more than 300 houses swept away. "Charter granted for erection of new port."
1286-7	<i>Holland.</i> A dreadful storm, laid the whole country on both sides of the Zuyder-zee under water. To such a height did the waters rise that Count Florence took advantage of the circumstance to subdue the inland towns by armed vessels called "Cogs."— <i>Davies' Holland.</i>
1287	<i>England.</i> Winter excessively rainy; great floods. June 1. Sea broke in from the Humber to Yarmouth forced by the winds. In Dec. on Suffolk and Norfolk coasts. Plague all the year.

- 1287 *Selandria* (?). 15 islands submerged by the sea, 15,000 people drowned.
 1291 *Damascus* (Syria). Inundated by overflowing of streams.
 1299 *England*. Flood after a comet. In Nov. inundation from the sea, in the Thames. "In Dec. great calm, heat, and clearness."—*Short*.
 1304 *Damascus*. Again inundated.
 1330 *England*. Heavy rains; corn harvest not commenced till Michaelmas.
 1333 *Florence*. Nov. Great overflow of the Arno.
 1335 *England*. Continued rain storms; corn spoiled.
 1338 *England*. Continuous rain from beginning of October to December.
 1339 *England*. March 22. Great flood in Tyne; many lives lost.
 1348 *England*. Violent rains from Midsummer to Christmas, "so that there was not one day and night dry together."
 1350 *England*. "Floods, storms, tempests, and fiery meteors in the air."
 1365 *England*. Violent rain storms.
 1396 *Holland*. "Another deluge," which formed the Marsdiep, separated the islands of Texel, Vlielandt, and Wieringen from the mainland, and submerged other districts. "This first raised the commerce of Amsterdam."
 1404 *England*. An inundation from the sea.
 1412 *England*. Oct. 12. "Sea flooded thrice without ebbing."
 1421 *Holland*. Dreadful and most destructive inundation, overwhelming 72 villages, 20 of which were never recovered. The loss of life [nearly 100,000 persons on some authorities] and property was immense; many noble families were reduced almost to beggary. By this inundation the Biesbosch was formed, and the town of Dordrecht separated from the mainland of Holland. [Some authorities give the date of this event as 1446.]
 1476 *Istula* (?). Flood of the.—*Short*.
 1483 *England*. The Severn overflowed during 10 days and carried away men, women and children in their beds, and covered the tops of many mountains; the waters settled upon the lands, and were called "The Great Waters" for 100 years after.—*Holinshed*.
 1491 *Ireland*. Great rain and floods all the summer; called the "Dismal Year."
 1501 *Germany*. The Elbe overflowed. Aug. 14. The Albis ditto.
 1511 *Ireland*. Great inundation, which produced considerable destruction.
 1515 *Germany*. "All Germany like a sea, and Cracovia flooded."—*Short*.
 1521 *Holland*. Nov. 1. "A dire inundation of the sea, 100,000 drowned."—*Short*.
 1523-6 *Turkey*. The rivers greatly swollen, and pestilential diseases prevalent.
 1524 *Naples*. Terrible inundation.
 1527 *England*. Great flood.
 1529 *Switzerland*. June 13 or 14. Great flood at Basle. *England*, Oct. 2. Great flood in Thames.
 1530 *England*. Great floods all the year. *Rome*. Oct. 8. Great flood. *Holland*. Nov. Great floods.
 1532 *Holland*. Great floods.
 1534 *Poland*. Extensive floods.
 1547 *Tuscany*. Aug. 12. Great floods.
 1549 *England*. June 13. Severe rain floods.
 1550 *England*. "The Thames flowed thrice in 9 hours."—*Short*.
 1551 *Marpurg* [? Marpod or Mariapod, Austria]. Jan. and Feb. Great floods.
 1552 *Buddissina* (Saxony). Aug. 13. Great floods.
 1553 *Germany and Holland*. Jan. 19. Great floods in the Rhine.
 1554 *Ireland*. Perpetual rain all winter; great floods.
 1555 *England*. Sept. 21. Great flood in the Thames.
 1557 *France*. Sept. 10. Floods near the district of Languedoc.
 1561 *Brussels*. April 21. Great floods.
 1564 *England*. Sept. 20. The Thames greatly overflowed.
 1565 *Louvain* (France). Great inundation from the sea; wind.
 1569 *England and France*. Great floods.
 1570 *England*. Oct. 5. Inundation from the sea.
 " *Holland*. Inundation. A strong north-west wind occurring during the high tides drove the sea with such violence against the dykes that several of them were broken down. The waters rushed in on every side, and rolling forward with resistless fury, swept away houses, trees, men, and cattle, in one universal ruin. Entire villages were destroyed. The number of lives lost in Friesland alone was estimated at 20,000; and was very extensive in other provinces. "The damage to property incalculable." The Spaniards (then at war with the Netherlands) imputed the flood, which occurred on All Saints' Day, to the vengeance of God upon the heresy of the land; the Netherlands looked upon it as an omen portending some violent commotions.
 1571 *Flanders*. August. Great floods; also in *France* and *Germany*.

1573	<i>Holland.</i> Sept. 1. Inundation from the sea.
1574	<i>Leyden</i> (Holland). A violent equinoctial gale broke through the dykes. By this means the city, then besieged by the Spaniards, was saved.
1579	<i>England.</i> Sept. and Oct. Great inundation from the sea and from rains.
1594	<i>England.</i> Floods in Surrey; also in Cambridgeshire and Hertfordshire.
1595	<i>Germany.</i> Considerable floods.
1596	<i>England.</i> "Floods all summer."— <i>Short.</i>
1598	<i>Rome.</i> Considerable floods.
1599	<i>England.</i> Nov. Floods.
1606	<i>England.</i> March 29. General floods.
1607	<i>England.</i> The waters rose above the tops of the houses, and upwards of 100 people perished in Gloucestershire and Somersetshire. Flood also in Coventry, which destroyed 257 houses.
1608	<i>France.</i> The Loire overflowed its banks and caused great destruction of property.
1611	<i>England.</i> Floods from rain all Nov. and Dec.
1613	<i>Germany, France, etc.</i> All grain destroyed by rains.
1614	<i>Lincolnshire</i> (England). The sea came 12 miles inland.
1616	<i>Manchester.</i> "An extraordinary flood."
1617	<i>Catalonia</i> (Spain). Great floods; 15,000 people perished.
1619	<i>Thuringia</i> (Germany). July. Great rain floods.
1620	<i>Germany.</i> Nov. Great floods.
1623	<i>Austria, Hungary, etc.</i> The Danube greatly overflowed.
1626	<i>England.</i> June 6. Great floods.
1627	<i>Austria; Danube.</i> Sept. "A cloud loaded with a sea of water burst."
"	<i>Apulia</i> (Naples). Great floods.
1629	<i>Mexico.</i> City of, deluged from the mountains. The effects continued for several years.
June 20	
1630	<i>Scotland.</i> Great floods in the Clyde.
1633	<i>Cork</i> (Ireland). A "prodigious flood of the sea" swept away some of the public buildings and bridges.
1637	<i>East Friesland.</i> Sept. 1. Great floods.
1639	<i>England.</i> Oct. Great floods.
1640	<i>Dresden.</i> Sept. 23. Great floods.
1642	<i>Kaifong</i> [or <i>Cai-fong-fon</i>] (China). Besieged by the rebels, and the embankments destroyed. It was computed that 300,000 perished by this inundation.
1643	<i>Thuringia</i> (Austria). Great floods.
1644	<i>Spain and Holland.</i> Considerable floods.
1646	<i>Holland, Friesland, Zealand, etc.</i> Great inundations. Some authorities state that as many as 110,000 persons were drowned.
1649	<i>England.</i> Very general floods.
1655	<i>England.</i> January. Considerable floods.
1656	<i>Rome.</i> Floods.
1658	<i>Faversham</i> (Kent). Considerable floods.
1660	<i>England.</i> Nov. 11. Great floods in Thames valley.
1661	<i>Kent.</i> Considerable floods.
1665	<i>England.</i> Great flooding of rivers; and inundations from the sea.
1666	<i>England.</i> Oct. Great floods.
1670	<i>Bridgewater</i> (Somerset). Great floods.
1678	<i>Middlesex</i> (England). Considerable floods.
1680	<i>Oxford.</i> June. Great floods.
"	<i>Ireland.</i> "An inundation near Londonderry."
1682	<i>England.</i> "Rain, hail, floods, all the summer."— <i>Short.</i>
1686	<i>Yorkshire.</i> A rock opened and poured out water to the height of a church steeple.— <i>Phil. Trans.</i>
1687	<i>Ireland.</i> Excessive rains; great flood in Dublin.
1705	<i>Ireland.</i> Flood at Limerick; "half Limerick drowned."
"	<i>Europe.</i> Great rains and floods over Continent of Europe.
1711	<i>Mobile</i> (U.S.A.). City almost destroyed by inundations at the mouth of the Mobile river.
1717	<i>Zealand; Hamburg.</i> Inundation from the sea in Zealand; 1300 persons drowned. "Incredible damage done in Hamburg."
1720	<i>Northampton</i> (England). A great flood did considerable damage.
1721	<i>Adige</i> (Italy). Terrible floods occurred in the valley through which this river (the ancient <i>Athesis</i>) runs.
1723	<i>Madrid</i> (Spain). Great floods; many persons of distinction drowned.
1724	<i>Adige</i> (Italy). Great floods in the valley of the.
1726	<i>Europe.</i> Great inundations and floods "all over Europe."
1729	<i>England and Ireland.</i> Great rains and floods.
1734	<i>Belper</i> (Derbyshire). A flood carried away the bridge over the Derwent and did other damage.

1740	<i>Dublin.</i> Heavy rains and great floods ; shipping at Dublin injured.
1742	<i>Limerick</i> (Ireland). Great flood ; much damage.
1745	<i>Dublin.</i> Great flood ; serious damages to bridges, etc.
1752	<i>Wales.</i> Sept. 19. Great rain storm ; 10,000 sheep drowned.
1753	<i>Ireland.</i> Great inundations through the country.
"	<i>Germany ; Holland.</i> Great overflow of the Rhine.
1754	<i>England and Scotland.</i> Great rain storms in early spring.
"	<i>Germany and Holland.</i> Serious floods.
1756	<i>England and Europe.</i> Great floods.
1761	<i>England.</i> Great rains and floods.
"	<i>Ireland.</i> Great floods ; especially in Cork and Dublin.
"	<i>Europe.</i> Great rains and floods in south of Europe.
1762	<i>England.</i> Great flood in the Thames Valley, and other parts of England.
"	<i>Dublin.</i> Oct. 21. Serious flood, and much damage.
"	<i>Burhanpoor</i> (in the Deccan, Hindostan). The river Taptee greatly swollen in consequence of heavy rains, and one-fourth of this city inundated, and one-tenth of the houses destroyed.
1763	<i>England and Europe.</i> Great rains and floods.
"	<i>Ireland.</i> Floods. "Above 200 persons perished on the river Nore."
1764	<i>Ireland.</i> Jan. Great floods in Dublin, Cork, and other parts.
1765	<i>England and Europe.</i> General rain storms and floods.
"	<i>Ireland.</i> Great floods throughout the south.
1770-1	<i>Holland.</i> "Terrific floods, combined with an infectious disease rife among the cattle."— <i>Davies' Holland.</i>
1771	<i>Yorkshire</i> (England). A dreadful inundation called the Ripon Flood.— <i>Vincent.</i>
1773	<i>Ireland.</i> Great mountain torrents.
1775	<i>Rotterdam</i> (Holland). The Meuse overflowed, doing considerable damage.
1776	<i>France.</i> April 25. Village of Bar le Duc destroyed ; and other damage.
1777	<i>Dublin.</i> Great flood ; six feet of water in St. Patrick's Cathedral.
1787	<i>Manchester.</i> A great flood did much damage.
"	<i>Ireland.</i> Great flood in most of the principal rivers of Ireland. Also in Dublin ; 8 ft. of water in the Cathedral.
"	<i>Navarre</i> (Spain). Sept. Great torrents from the mountains ; over 2000 persons lost their lives.
May	<i>Coringa</i> (Hindostan). Great inundation swept away all the houses, and destroyed nearly the entire pop. It extended far inland. Loss of life 15,000 people ; and more than 100,000 head of cattle.
1789	<i>England.</i> Great rain storms in the north.
1791	<i>Cuba.</i> Great torrents of rain ; 3000 persons, and 11,700 head of cattle of various kinds drowned.
June 21	<i>Retford</i> (Notts). Great floods which caused much damage to the town.
1795	<i>England.</i> Great floods ; much damage to shipping, etc.
1802	<i>Dublin.</i> Jan. and Feb. Great overflow of the Liffey. "Immense damage."
"	<i>Europe.</i> In the South great rain storms.
April 14	<i>Lorea</i> (Mercia in Spain). A reservoir burst, which inundated more than 20 leagues, and drowned upwards of 1000 persons, besides cattle.
1807	<i>Dublin.</i> Great floods in the neighbourhood.
1811	<i>Pesth</i> (Hungary). Overflow of Danube, by which 24 villages and their inhabitants were swept away.
April	<i>Shropshire</i> (England). Bursting of a cloud near Salop ; many persons and cattle drowned.
May	<i>Austria, Hungary, and Poland.</i> Great floods from rain during the summer. Produced famine in Poland ; and caused loss of 4000 lives.
1813	<i>Widdin</i> (Danube). Sept. 14. Island near, on which were 2000 Turkish troops, suddenly flooded ; all drowned.
"	<i>Silesia</i> (Prussia). The floods caused the death of about 6000 inhabitants ; and the ruin of the French army under Macdonald was accelerated by the same cause.— <i>Vincent.</i>
1814	<i>Ireland.</i> The Shannon again overflowed and did great damage.
1816	<i>Strabane</i> (Ireland). The melting of the snow in the mountains caused most destructive floods.
Jan. 2	<i>Germany.</i> The Vistula overflowed ; many villages submerged ; great loss of life and property.
Mar. 21	<i>Ireland.</i> Great floods at Londonderry.
April 21	<i>England.</i> Great quantities of rain fell ; harvest much delayed. Also on Continent.
Aug.	<i>Ireland.</i> Great floods ; waterspout in Clare.
1818	<i>England.</i> June. Large tracts of land flooded in the Fen Country.
1819	<i>Ireland.</i> Great floods in the north.
"	<i>England.</i> Disastrous rains and floods.
1821	

1821	<i>Ireland.</i> Aug. and Sept. Serious floods and rains throughout the west; not only was hay and grain washed away, but the potatoes were swept up out of the ground. October. Heavy rains and floods. November. Incessant rains and floods; Shannon rose greatly. Also floods in Dublin.
1822	<i>Gt. Britain.</i> Jan. Great storms and floods through British Islands generally.
"	<i>Ireland.</i> Great storms and inundations at Wexford and Cork.
"	<i>Geneva.</i> Great floods; serious damage.
"	<i>Havanna.</i> Great deluge at.
1824	<i>Belfast (Ireland).</i> Great floods at.
Nov. 19	<i>St. Petersburg (Russia).</i> Flooded from the overflowing of the Neva. The river rose to the first story of the houses in this city. Carriages and horses were swept away, and a regiment of Carabineers, who had climbed to the roof of their barracks, were drowned. At <i>Cronstadt</i> a 100-gun ship of the line was left in the middle of the market-place. In the two places more than 10,000 lives were lost, and property to the amount of many millions of roubles was destroyed. The Neva had overflowed in 1728, 1729, 1735, 1740, 1742, and 1777; but none of these occasions was equal to that of 1824.
1825	<i>Denmark.</i> During a violent storm the sea broke through the isthmus between the North Sea and Lymfiord, thereby making the north part of Jutland an island.
"	<i>Rotterdam (Holland).</i> The Meuse overflowed, doing considerable damage.
1827	<i>Naples.</i> Destructive inundations.
1828	<i>Ireland.</i> Great rise of the Shannon; Cork also flooded.
1829	<i>Dantzic.</i> The Vistula broke through its dykes, by which some 4000 houses were destroyed and many of their occupants drowned. About 10,000 head of cattle were lost.
April 9	<i>Scotland.</i> The "Moray Floods" caused by rainfall, when the Spey and Findhorn rose in some places 50 feet above their ordinary level, and caused great destruction of property. Many lives were lost.— <i>Sir T. D. Lauder.</i>
"	<i>Ireland.</i> Great floods in south of Ireland.
1830	<i>Vienna.</i> Feb. The dwellings of 50,000 of the inhabitants were under water.
"	<i>Coblentz (Prussia).</i> In the spring the waters of the Moselle thawed before those of the Rhine, and being stopped by the ice did very considerable damage.
1831	<i>Ireland.</i> Great floods in the Liffey; and waterspouts in various parts of the country.
Feb.	<i>Coringa (Hindostan).</i> Great and most destructive inundation.
1832	<i>Canton (China).</i> Incessant rains; about 10,000 houses were swept away, and 1000 persons drowned. The rains extended to other parts of China.
1833	<i>Oct.</i> <i>Calcutta (India).</i> A high tide in the Hooghley committed great destruction.
1834	<i>Gibraltar.</i> Waterspout and great damage from floods.
1837	<i>England.</i> Floods caused by thaw.
1840	<i>France.</i> The Saone poured its waters into the Rhone, broke through its banks and covered 60,000 acres. Lyons was inundated. In Avignon too houses were swept away, still a greater number at La Guillotiere; and upwards of 300 at Vaise, Marseilles and Nismes. Many villages almost swept away. The Saone had not attained such a height for 238 years.
Oct. 31	<i>Middlesex.</i> Great floods at Brentford and surrounding districts; many lives lost and considerable destruction of property.
Nov. 4	<i>France.</i> Great floods at Macon and neighbourhood; immense damage done.
1841	<i>Ireland.</i> Great floods at Limerick; waterspouts elsewhere.
Jan. 16	<i>Ireland.</i> Extensive floods in the east and south.
Nov.	<i>China.</i> Great floods. "Along the shores of the Yellow Sea, the phenomenon took the character of a second deluge; whole provinces being submerged."
1842	<i>France.</i> Overwhelming inundations in the centre, west, and south-west; numerous bridges, with the viaduct of the Orleans and Vierzon railway, swept away. The latter had cost 6 million fr. [£240,000]. The Loire rose 20 ft. in one night. The total destruction was estimated at over £4,000,000 stg.
1844	<i>Oct. 22</i> <i>Inverness (Scotland).</i> Great overflow of the river Ness, which swept away the old bridge and did other damage.
1845	<i>Ireland.</i> Great floods in County Kerry; bridges destroyed, etc. August. Great floods in Limerick.
1846	<i>Belgium.</i> Calamitous flood.
Oct. 22	<i>Khartoum (Egypt).</i> "An inundation occurred."
1850	<i>Ireland.</i> Great and destructive floods alike in spring and autumn.
1851	<i>Holmfirth, near Huddersfield (Yorks).</i> The reservoir burst, consequent upon a rain flood. Between 90 and 100 persons perished; and property was destroyed of the value of £600,000, consisting of woollen mills, houses, etc., in the valley.
1852	
Feb. 6.	

1852 Sept., Oct. Nov.	<i>England.</i> Dreadful storms and floods in many parts of the country, more especially in the Severn valley; also in Derbyshire; in Sussex, and in Scotland, and in <i>Dublin</i> .
"	<i>Switzerland</i> and parts of <i>Belgium</i> , <i>France</i> and <i>Germany</i> suffered severely.
1853 July 9	For full details of floods at home and abroad this year, see <i>Gent. Mag.</i> <i>South Wales.</i> Great floods caused by rain. At Brecon the Hondda rose to a great height, and carried away the bridge. Many houses inundated. People escaped by resorting to the upper parts of their dwellings.
Nov. 2	<i>Cork.</i> Great overflow of the Lee. St. Patrick's bridge swept away, with many people on it.
1855, Jan. 1	<i>Hamburg.</i> An overflow of the Elbe laid the greater part of the city under water.
1856 June 1	<i>France</i> (South of). Great floods occasioning loss of agricultural produce and other property to the extent of 140 million fr. (£5,600,000). [FLOODS, INS. AGAINST.]
"	<i>Prome</i> (Burmah). Great overflow of the Irrawaddy nearly destroyed this town.
1861 Jan., Feb.	<i>Holland.</i> Great inundations. About 30,000 of the peasantry rendered destitute.
1861	<i>Montreal</i> (Canada). Flood, occasioned by the breaking of the ice of the St. Lawrence in the spring, laid the greater part of the city under water, and occasioned the destruction of a large amount of property.
1862 May 4	<i>St. Germain</i> (near King's Lynn). Great inundation through the bursting of the Middle Level Sluice. Some 10,000 acres of cultivated land submerged.
Oct. 4	Another marshland sluice burst; large tract flooded.
1863 Dec. 14-24	<i>Melbourne</i> (Australia). A flood, caused by the rising of the waters of the Yarra- yarra 40 ft. above their usual level, submerged the greater portion of the city and destroyed property to the value of £250,000.
1864 Mar. 11	<i>Bradfield Reservoir</i> (near Sheffield). The embankment gave way at midnight; the water rushed in torrents through the neighbouring villages. Great destruction of property, and 250 persons drowned.
Oct. 31	<i>Arelas</i> (France). The bridge of boats and much property destroyed by a sudden rising of the Rhone.
1866 Nov.	<i>France.</i> Sept. Most extensive damage from floods. <i>England.</i> Great floods in the north, especially in Yorkshire, Lancashire, and Derbyshire; farms destroyed, mills thrown down, railways stopped, and mines flooded. The towns of Leeds, Manchester, Preston, and Wakefield suffered much.
1868	<i>Baltimore</i> (U.S.). July 24. Great damage to the city by flood. Many lives lost.
1869	<i>Ireland.</i> Jan. Great floods in Cork, Dublin, and other places.
1870	<i>Rome.</i> Dec. Considerable floods, causing great distress.
1871	<i>England.</i> Extensive floods. Mr. Alfred Haviland pub. a paper: <i>The present Floods and the Cancer Fields</i> . [RAIN.]
"	<i>Burmah.</i> Great floods near Prome.
1872 July	<i>Manchester.</i> The Medlock overflowed its banks and caused great destruction of property.
Oct.	<i>Italy.</i> Great floods in north of Italy; the Po and other rivers overflowed; thousands of people unhoused. Mantua, Ferrara, etc., suffered much.
1874 April	<i>London.</i> March. Great damage on banks of Thames from very high tide. <i>United States.</i> Great floods in the Mississippi valley, mainly in Louisiana. About 250,000 acres of cotton, 100,000 acres of corn, and 500,000 acres of sugar were submerged. New Orleans was in considerable danger for a time, part of the levees which protect that city being broken down. About 25,000 persons were wholly or partially ruined.
May 16	<i>Massachusetts</i> (U.S.). Reservoir in Mill River Valley, near Northampton, burst. Several villages destroyed and about 140 lives lost.
July 24	<i>Nevada</i> (U.S.). Great rainfall and waterspout. About 30 lives lost.
" 26	<i>Pittsburg and Alleghany</i> (U.S.). Great rain storm; rivers seriously flooded and about 220 persons drowned.
1875	This is one of the most generally disastrous years on record for floods. We shall endeavour to give a brief geographical record.
June	<i>France.</i> Tremendous floods in the south; at Toulouse, Verdun, Bordeaux, etc., many villages swept away; in the whole 6900 houses destroyed. About 1000 lives lost. The loss, mainly occasioned by the rising of the Garonne, was estimated at from £12,000,000 to £15,000,000. Public subscriptions opened in England.
"	<i>Hungary.</i> Disastrous floods near Buda-Pesth; great loss of life and property.
July	<i>England.</i> Great floods in the Midland and Eastern Counties, West of England, Wales, and in Eastern Scotland.
"	<i>Hungary.</i> Another storm broke over Buda-Pesth; great damage; public subscription opened.
"	<i>Silesia.</i> Torrents of rain; great damage.

1875	<i>Germany.</i> A waterspout burst near the town of Kirm; a number of persons drowned; much property destroyed.
Aug.	<i>United States.</i> Great floods in the Central States; in Central Illinois, and in the Ohio and Mississippi valleys; also in Arkansas.
"	<i>Burmah.</i> Heavy floods, exceeding those of 1871.
"	<i>India.</i> Disastrous floods in the North-West Provinces; great loss of life and destruction of property.
Sept.	<i>France.</i> Again great floods in the south of France, at Montpellier, etc. Vineyards damaged.
"	<i>Switzerland.</i> Great floods in Canton Glarns. <i>Holland.</i> Great floods.
"	<i>Texas.</i> Great flood in Indianola, nine-tenths of houses destroyed, and much other damage. Public subscription through the U.S.
Oct.	<i>England.</i> Great floods in the Midland Counties, also in the North-Western counties at Dawlish.
"	<i>Venice.</i> A considerable flood; the Adriatic driven in by a gale.
1876	<i>France and Holland.</i> March. Severe inundations.
Oct.	<i>Wales.</i> Great damage in South Wales from overflow of river Ebbw; collieries damaged, etc.
"	<i>Bengal.</i> Great inundation of tidal wave, consequent upon hurricane. Estimates of loss of life as high as 200,000; loss of property immense. [HURRICANES.]
Nov.	<i>Scotland.</i> Great floods in Perth and Forfar. Caledonian Railway much injured.
Dec.	<i>England.</i> Floods generally throughout England.
"	<i>Turkey.</i> Deluge of rain round Adrianople; 1000 houses said to be swept away; and other serious damage.
Dec.	<i>Spain and Portugal.</i> Great floods in Andalusia, and especially in Seville. Also in Southern Portugal. See <i>Times</i> , 26 Dec.
1877	<i>London and England generally.</i> Great damage done in the southern districts of London by high tide combined with floods; also in Thames Valley generally. Destruction estimated at over £200,000. A subscription opened by Lord Mayor for relief of poorer sufferers. Large sums raised. In the Eastern, Midland, and South-Western Counties great floods.
Jan.	

It is only when such a table of facts as the preceding—and it might have been much enlarged—is before us, that we realize the extended bearing of the subject of FLOOD INS. The necessity is indeed more than ever apparent; but the data is still incomplete. [CYCLONES.] [DROWNING.] [EARTHQUAKES.] [FAMINES.] [HURRICANES.] [RAIN.] [STORMS.] [TORNADOS.]

FLOORCLOTH FACTORIES.—These are highly hazardous risks. There is extreme danger of fire, and in the event of a conflagration it is usually most destructive. They carry a very high prem. and are sometimes almost uninsurable.—*Ins. Agent.*

FLOORS.—The importance of the construction of floors in regard to the safety of houses and buildings has already been referred to under FIREPROOF BUILDINGS. Those who desire more technical information upon the subject may, with advantage, consult Captain Shaw's *Fire Surveys*, 1872. [NOTTINGHAM.]

FLORENCE.—A city of great renown in Italy. It was a flourishing town A.D. 16. In 1115, and again in 1117, it was burned. In 1189, or soon after, it became an Independent Republic. In 1266 the city had a new constitution, and the Trade Guilds were admitted to the chief government. [GILDS.] It suffered from flood in Nov. 1333; from plague in 1340, and again in 1348; from famine in 1347. It recovered Pisa (44 miles W.), which had formerly been its outport, in 1509. Some of the earlier incidents regarding Marine Ins. centre themselves in and round this city. We shall speak of these under the next title; and under MARINE INS., HIST. OF.

1765-6.—There was pub. at "Lisbona e Lucca" a work in 4 quarto vols. edited by Signor Sarchi: *Della Decima e di varie altre Gravasse imposte dal comune di Firenze, della Moneta e della Mercatura di Fiorentini fino al Secolo xvi.* The 3rd vol. contains: *La Pratica della Mercatura*, by Francisco Balducci Pegolotti, edited from a manuscript in the library of the Marquis Riccardi at Florence. In the 4th vol. is given the treatise bearing the same title, by Giovanni di Antonio da Uzzano, edited from a manuscript belonging to Dr. Canini of Florence. In this treatise is contained a reference to what Mr. Frederick Hendriks aptly describes as "the first records of the practical application of the prem. of ins. in mediæval Europe." This is believed to have been at Pisa, about the year 1400. [MARINE INS., HIST. OF.] [PISA.]

1867.—The 6th International Statistical Congress was held in this city. An instructive account of the proceedings thereat, as written by the late Mr. Samuel Brown, will be found in the *Journ. of Statistical So.* vol. xxxi. p. 11.

1872.—Hiram Powers, the American sculptor, long resident in this city, wrote to a friend at home:—"I once beheld some firemen marching to a fire in Florence. Foremost were 3 men with picks, next 4 men with buckets, then 3 men with highly polished brass squirts on their shoulders, all marching with an air of pomp and importance. . . ." This goes to show that fires are neither very frequent nor very serious in this city, the reason for which has been stated under FIREPROOF BUILDINGS at this date.

FLORENCE, MARINE INS. ORDINANCES OF [1408, etc.].—Some of the earliest regulations regarding Marine Ins. of which we have any precise knowledge appear to date from this city. It had in force an Ordin. of Marine Ins., or at least Regulations concerning Marine Ins. dated 22 Nov. 1408. We have no very exact knowledge of the scope and bearing of these; but one of the regulations caused considerable comment. It is thus referred to by Roccus in his famous *Manual of Marine Ins.* (pub in Naples, 1655):

There is a law at Florence prohibiting Florentines from making insurances for foreigners, but permitting them among their own citizens. This statute is binding even where an insurer affects to renounce its provisions, for they cannot be disregarded, as it is a *prohibitory statute*. This law has relation not only to goods and other mercantile articles, but also to ships and any other article of ins.

Uzzano, a Florentine merchant, who wrote a treatise prob. early in the 15th century (although it was not printed until the 18th), says hereon:

The Ordin. which forbids the ins. of foreigners shall not hold good so far as respects merchandize exported to or imported from Pisa.

1457.—Pardessus refers to a "Statute of Navigation" under this date. This will be spoken of under PISA.

1523.—The acquisition of Livorno (*Leghorn*) from the Genoese by the Florentines in 1421, and their final recovery of Pisa in 1509, led them to the renewal of their former ambition of becoming a maritime power. Accordingly they promulgated a new Ordin. for the regulation of marine ins. and other maritime matters, which bears date "Florence, January 28, 1523" [Reddie gives the dates as 1522 and 1528], and which we now proceed to notice. The following are its main provisions:

No person of what quality or condition soever, who for the future shall have a mind to cause ins. to be made in the Dominions of Florence, against dangers in general, or particular ones, which he is apprehensive his merchandizes, money, or other goods, will run at sea, or be liable to run, shall be permitted to do it otherwise, than according to the tenor of the general and common Ordin. now in use, without having liberty to add anything thereto, unless some circumstance happens whereof notice is not taken in that Ordin.; in which case the same shall be allowed him, with the consent and after sufficient advice of the Five Deputies, and no otherwise. And a copy of that general and common Ordin. shall be inserted word for word in the Book of these Magistrates, that it may come to everybody's knowledge, and every one be enabled to conform himself thereto.

Item.—No ins. shall be made in the Dominions of Florence during the ensuing year [? for any period exceeding 1 year] under the general expression of, "on all and every passage"; but the ship or vessel shall be named agreeably to the above-mentioned general and common Ordin.; except in the case of insurances in the Gulph of Ancona, and Raugia, Fiume, Liguareccio, or Alla Velona, or such parts, and in such circumstances, where ins. are made conformable to the Ordin. hitherto in use in those places; whereof a copy shall be contained in the said Book of the Magistrates. Exception however is to be made upon the emergency of an unexpected case; in which the regulations of the above-mentioned general and common Ordin. shall be observed.

Item.—If the said Deputies, or their successors in time to come, shall find it for the common good of the city, to fix the rate of ins. that is to be made, they shall have power to do the same in form and manner as they in their deliberations shall agree; having regard, in settling it, to the circumstances of the weather, and the rate of ins. in other places.

Item.—Whenever ins. are made on ships, which at the time of insuring were actually lost, and the news of the loss could have been brought, before the day of insuring, to the place where it was made, no action or demand shall have place. Concerning the question whether or no news of the loss could, within such time, have been brought to the city? the parties shall stand to the decision of 6 merchants, and 6 others joined in commission with them, who are to weigh the circumstances of the place, and the state of the weather, and length of time, and thereupon to declare whether or no, the news could have reached the city.

Item.—In case of a ship's being cast away, or suffering reprisals from the enemy, or other damages and losses happening to her or her cargo, the said Deputies shall employ proper persons for the saving or recovery of such ship or goods.

Item.—For defraying the expenses they may be at for that purpose, they shall assess the merchants and insurers concerned in the ship and cargo; taking the necessary measures to compel them to pay their quotas.

Item.—Without the permission, or advice and decision of at least 3 of these Deputies, no money for goods thrown overboard or ransomed shall be extracted, nor prems. that are paid for ins. returned.

Besides what has been already declared, 'tis further ordered, that the above Deputies shall take cognizance of all matters and cases of ins., and that at least 4 of them shall join in the sentence; which they are to give according to what they shall think just and equitable in such cases. Whoever finds himself aggrieved by their decree may appeal to the six, as mentioned in the first instance: And no other Court besides these Deputies shall have power to give judgment in such cases. [POLICIES OF INS. COURTS.] Moreover, notwithstanding the above prohibition, that no ins. during 1 year shall be made under the general expression of "on all and every passage," 'tis declared, that in order to give all possible assistance to the merchants, it shall be lawful for them, in case they shall think proper, to cause ins. to be made on all and every passage, but under such conditions and limitations as these Deputies shall think proper.

Then follow forms of pol. as prescribed by the Ordin. These we shall give under MARINE INS. POL.

1526.—The preceding Ordin. was amended by new regulations under date "June 15," this year, as follows:

The Hon. Deputies for Ins., assembled at their ordinary place of meeting, duly considering the power given them by the community of Florence, to make regulations concerning goods sent by sea, having found that they had formerly ordered, that all sorts of merchandizes might be insured, without expressing of what kind; and experience having shown that such a general declaration is liable to inconveniences, 'tis hereby enacted, That under this general name of merchandizes shall not be understood Staves, Fruits, Horses, Corn, Wines, Salted Fish, Vitriol, Alum, Precious Stones, Oils, Iron Ore, Household Goods, Fine-worked or Coined Gold and Silver, of what denomination soever; and that whosoever has a mind to get any of these commodities insured, shall be obliged to cause the Broker to set down in the pol. of ins. that he intends to have these things insured, mentioning them by name, and in express words, one after another. Otherwise the ins. shall be *ipso jure* of no validity, nor shall any judgment be given in favour of such things, and if the same is given anywhere, it shall not be binding.

Such as trespass against this order shall be fined 25 golden florins; one moiety to the Court of Eight [Magistrates Court], the half part of the other moiety to the suffering party, and the rest to such as compel the offender to pay the fine; and every judge or officer is empowered to levy it on the offender, the right of prevention taking place in such cases. Whoever gets his goods insured in any other manner shall forfeit the sum paid for insuring; and whoever receives it may keep it as his own. Besides, the Broker shall pay a fine of 20 gold florins, which shall be levied and distributed in the manner aforesaid. Provided however that what has been said above concerning gold and silver be not understood to affect ins. made to the *Gulph of Venice*, to *Velona*, or from *Velona* to other places, or such as are made to any other place in the said Gulph, to which ins. may be made on coined or uncoined gold or silver in the manner it has before been usual.

Item.—They order that as length of time may perhaps give occasion to sinister thoughts, such as for the future apply for ins. must get the insured goods unloaded within a twelvemonth, computing from the day the ins. is made; and if they are not unloaded within that time, be the reason what it will, even though it may proceed from an unforeseen accident, *the insurers shall be under no obligation any longer, but free*; and shall return what they have received, keeping however one half per cent.

Item.—They order that if all or a part of the insured goods be, with the consent of the owner, or him that caused them to be insured, *loaded on the ship's deck, the insurers shall not be under any obligation, and yet be entitled to the prem.* [Magens considers the meaning of this clause to be: That if goods be, with the consent of the owner or person who makes the ins., loaded on the deck, the insurers, who understood that they were loaded *under* the deck, shall not be obliged to make good the loss or damage of such goods; and the insured shall nevertheless pay the prem. as a penalty for having so loaded them.] But if they were loaded on the deck, and the master of the ship do not produce the owner's permission for it, or his that caused the ins. to be made, the insurers shall remain bound to the insured, but may have their remedy against the master of the ship: and the insured on being desired to deliver up the documents he has against the master is obliged to comply therewith, in the manner the insurers request of him, and as far as it is in his power to satisfy them on that head.

Item.—It is enacted that the clause in the pol. of ins., viz. *Payment is first of all to be made, and afterwards recourse is to be had to Law*, must be understood in such cases where the insured first produces the bill of lading, and exhibits it to the said Officers or Deputies: In default of such documents and witnesses, or authentic attestations of the shipping of such goods; or when the documents for proving the misfortune that has happened to the goods are wanting, or their credibility is questionable, the parties are to acquiesce in the decision of the said Officers, which shall be made without any form or solemnity. Such a decision passed in a summary and extra-judicial manner shall be in force; and then the exception in the pol. is to be understood according to the said decision; and ought not to be allowed before; or if it is, shall be of no validity.

Item.—They order that whoever gets ins. to be made here at *Florence*, on things or quantities somewhere else insured before, shall be obliged to give notice of such previous ins. made at another place, within 10 days from the time of their getting knowledge thereof, to the Chancellor of the Office of Insurers, who must acquaint the insurers at Florence therewith, in order that upon an emergency it may be judged, which of the insurers, the Home or the Foreign, is answerable. In case no notification is made, and the Insurers prove that he who got the ins. made had such knowledge as aforesaid, the insurers at *Florence*, on the decision of the said Officers, shall be deemed to have deserved the prem. received for such an ins., and not be answerable any longer for the danger; but the insured must have his remedy against the first insurer. This however is only to be understood, when the ins. is made on one and the same thing and quantity here and elsewhere; but when the same thing and quantity are insured partly here and partly at another place, and no higher sum is insured than the prime cost of the goods amounts to, the contents of the pol. shall be complied with, without further notification.

1755.—Magens, in his *Essay on Insurances*, pub. this year, commenting on the preceding Ordin., says:

These are the ancient Ordin. of the city of *Florence*, made at a time when commerce was there in a flourishing state. They were followed in the trading city of *Leghorn* with respect to ins. at sea, and are still partly observed there; although, as times have changed, it has been found necessary to alter them, or to substitute others in their place.

These Ordin. were followed by others relating more specifically to *LEGHORN* and *PISA*, under which titles they will be passed under review.

FLORENCOURT, CARL CHASSOT DE.—In 1781 he pub. at Altenburg, in Germany, a work on Political Economy written in German, in which he gave a T. of annuity values for single lives, computed from Deparcieux's T. of Mort., but making the annu. payable at the end of every year the life survived. His work also contains 3 new T. of Mort. deduced from the data given by Sussmilch. The book has an introduction by Herr A. G. Kaistner.

Dr. Price notices this writer as "the ingenious author of a mathematical treatise on political arithmetic, pub. in Germany in 1781."

FLORIDA.—One of the Southern States of the American Union, in form a peninsula; and in consequence of the cool sea-breezes it thus enjoys, it is a great health resort for invalids from other States. Indeed, a winter in Florida, in consequence of the real physical enjoyment it affords, is looked forward to with pleasure. In this connexion it is curious to remember that it was visited by Juan Ponce de Leon, the Spanish navigator, 4 April, 1512 [it was first discovered by Sebastian Cabot, 1497], in a voyage he had undertaken to discover a fountain whose waters had the property of restoring youth to the aged who tasted them! It was ceded by Spain to the U.S. by treaty 24 Oct. 1820. It has no special Ins. history.

FLORIDA, INS. LAWS OF THE STATE OF.—These will be found fully set forth in Hine's *Insurance Statutes* (U.S. and Canada), 1876; while an able abstract of these is given in Hayden's *Statutory Requirements*, 1876.

FLOTA.—A name given by the Spaniards to the ships that formerly sailed together, or under convoy, from Cadiz and other ports of the Peninsula, and authorized to trade directly with the Transatlantic possessions of Spain. The word is identical with *Fleet*, as used with us. From it is derived *Flotilla*, literally a little fleet; but usually signifying a considerable fleet of small vessels.

FLOTSAM.—Where a ship is sunk or cast away, and the goods are floating in the sea. **FLOTSAM**, **JETSAM**, and **LAGAN**, spoken of in this work separately, are all associated in idea; they each relate to goods thrown overboard in a storm, or floating from a wreck. All such goods belong to the Crown, unless claimed by their true owners within a year and a day. [**JETTISON.**] [**SALVAGE.**]

FLOUR-MILLS [**U.S. FLOURING-MILLS**].—These from having been in the early part of this century, when worked by water-power only, regarded as fair, if not desirable risks at 5*s.* p.c., have now come to be deemed, as indeed they are, risks of a very "special" character.

1832.—Mr. F. G. Smith, in his *Practical Remarks on the Present State of Fire Ins. Business*, quotes these at 7*s.* 6*d.*; or with kiln, 10*s.* 6*d.* in Scotland. He endeavours to justify these low rates by stating that they generally applied to mills working but 2 or 3 pairs of stones, and grinding oatmeal more frequently than grain flour.

1852.—During this and some previous years the *Essex Economic Fire* was insuring flour-mills worked by water power only, and in cases where the moral hazard was reduced to a minimum, at 3*s.* 6*d.*; they had been done by the same office at 2*s.* 6*d.*, and these were regarded as paying rates.

1854.—In the case of *Merchants and Manufacturers Ins. Co. v. Washington Ins. Co.*, before the Ohio Courts in 1854, it was held,—that accepting the risk of a steam flouring-mill involves the assumption of the acceptance of those things fairly and properly connected with such a bus., as part of and appertaining to it, whether newly introduced, or used before the ins. was effected or not. [1 Handy, Ohio, 181.]

There can be no doubt that the introduction of steam power to the machinery of flour-mills has greatly increased their danger as fire risks. The greater speed has led to dangers from friction of the going gear. But other improvements in the processes of milling have prob. been attended with even greater danger. The fineness of the flour produced—itsself an element of commercial value—has unquestionably greatly extended the risk of fire explosion; while the process of cleansing away the fibrous portions of the product has lent additional force in the same direction. These will be referred to as we proceed. We are not aware that any scientific record of flour-mill burnings has been kept in the U.K. In the U.S. there is such a record, and from it we draw a few instances of an instructive character.

1864. Sept. The "Star Mills" at Masconta, Illinois, burned. They were grinding middlings; about 3 o'clock in the morning the miller in charge went up to the chamber (a large box extending through several stories), as he had often done before, "to jar the middlings down," they having clogged. He carried a small oil lamp, which he placed on a beam just behind and above his head. He then opened a slide and thrust in a shovel, which started the flour down with a thump, raising a cloud of dust, when instantly, as if it had been coal-gas, it flashed, burning the miller's hair and beard, and filled the box with a sheet of flame, which spread with great rapidity, and burned the mill.

Several years before, in a mill at Dover, Kentucky, the floor of the flour-box gave way, with the weight of a man; great dust was created, which, the instant it reached the furnace in the boiler-room, to which it was naturally drawn, ignited with a flash and burned the mill.

1868. Nov. 20. Schmidt & Co.'s mill, St. Louis; the light—a globe lamp—was held near a bran-spout extending the height of the mill. The dust ignited, and the mill was speedily burned.

1869. Sept. Bertchey's mill, Milwaukee, burned. The fire originated in a candle being held near a feed-spout reaching through the mill. The ignition was instantaneous, several parts of the mill appearing to be on fire at the same moment.

It was about this period believed that the mixture, by way of adulteration, of rice in the manufacture of wheaten flour, greatly increased the hazard. [**RICE-MILLS.**]

1872.—A fire which occurred at the Tradeston Flour-Mills, near Glasgow, on the 9 July, this year, led to investigations of a scientific character, which have thrown an entirely new light upon these risks. The fire in this case was the result of an explosion, of which we have given a full account under **EXPLOSIONS**, sub-heading *Flour-Mills*. It may be useful here to say a few words upon the general conditions which lead to such explosions and consequent fires. Dr. Stevenson Macadam, who was one of the experts employed by the ins. offices to investigate this particular case, afterwards brought the whole subject before the Royal Scottish Soc. of Arts, and from an abstract of his then paper, as it appeared in the public journals at that date, we now propose to quote:

The Doctor stated that the searching inquiry, in which he took an active part, proved two points: 1. That there was nothing unusual being carried on in these mills which would render the operations more likely to lead to a fire explosion than in other mills elsewhere. 2. That fire explosions of an exactly similar nature, though differing in degree, had taken place in other mills in this country and on the Continent, though the public and even scientific men were unaware of such. Under the present arrangements of flour-mills there was absolutely nothing to hinder another disastrous catastrophe happening any day. The conditions required to bring about a flour explosion are some-

what similar to those which cause a gas explosion. Ordinary gas is combustible and not explosive when unmixed with air, and it only becomes explosive when mixed with sufficient air to burn it. Flour agrees with coal-gas in being simply combustible when unmixed with air, and equally agrees with coal-gas in being explosive when mingled with air; but the fine impalpable dust must be diffused through the air in definite proportions in order to constitute an explosion when a white heat, such as a flame or spark, is brought near. Too little or too much of either of the components (flour and air) of the explosive mixture must lead to the lessening of the explosive force and to the more gradual combustion of the flour dust. In order to bring about the explosion it is necessary also the flour-air mixture be more or less confined within a given space. The precautions to be taken in the future for the avoidance of flour-mill fire explosions must necessarily lead to the removal of exhaust-boxes, stive-rooms, smut-rooms, and other receptacles of flour-dust to the outside of the mill, and it would be better if these could be placed at the side of the mill where there were no windows. There should be no direct communication between the mill and those places except by the comparatively small spout or roan carrying the dust from the cleansing or grinding processes; and it would be better if the roans were provided with sliding or hinged valves, which would close at once if an explosion occurred in any of the dust receptacles leading to a back draught. No one should enter the exhaust-box or stive-room during the working of the mill; and the cleaning out of these places should be carried on when the stones are not grinding. No naked flame or light should be taken into any of the dust places, and all gas jets and lamps should be protected with glass and wire-gauze covering. He trusted that all flour-mill proprietors would now awake to a sense of the necessity of adopting all precautionary measures to arrest flour-mill fire explosions; for ignorance of the force of the flour-air mixture could now no longer be pleaded.

1873.—It appears from the Rep. of the So. for the Encouragement of Industry in Prussia, that in July this year Dr. Beringer, a mill-owner, reported upon investigations which had been made in Lower Austria. The conclusions there arrived at appear to have been that the heating of the flour was produced through the rapid revolutions of the stones; this prob. caused the diffusion of the fine dust through the atmosphere of the mill. It was stated to have been the practice of the old millers to moisten the grain before grinding.

The *Deutsche Versicherungs-Zeitung*, commenting upon the foregoing at a later date (6 June, 1875), threw a flood of new light upon the question, thus:

In fact, however, this theory is a very imperfect explanation of the phenomenon in question, and it would not have appeared satisfactory to the Asso. if there had been any member present at the session who had a thorough knowledge of chemistry. If the chemical constituents of meal are considered, the question assumes an entirely different aspect. All cereals, with the exception of buckwheat, contain a certain quantity of oily matter. For example: of a 1000 parts of flour, 18.50 are oleaginous; of rye, 21.09; of barley, 26.31; of oats, 39.90; and, of corn, as much as 48.37. These figures are taken from the famous work of Moleschott, entitled the *Chemistry of Food*, and embody the result of careful investigations by various eminent chemists. The presence of this oleaginous ingredient accounts completely for the explosive property of flour and meal. No reference is had to this ingredient in the manipulations to which grain is subjected. The kernels are crushed under a heavy pressure and heat is necessarily engendered by the operation, which prepares the oily matter contained in the meal for ignition. A spark struck out in the grinding of the stones, the flame of a lamp, candle or lantern, etc., is sufficient to ignite, instantaneously, the oil distributed among the fine particles of dust and flour, and hence results what is called an explosion. In the kernels of grain the oil is covered with starch and other substances, but by the grinding it is exposed to the air. All the conditions are, therefore, united for immediate combustion—oily matter heated and in a powdered state, atmospheric air to sustain the combustion, and the accident of a flame or spark struck from the mill-stones—the appearance of fire is a phenomenon naturally to be expected. It is to be remembered that the proportion of oleaginous matter is far from unimportant. From 18.50 p. 1000, or 1.8 p.c., in wheat, and 21.09 p. 1000, or 2.1 p.c. in rye, the proportion rises in other kinds of grain to 39.90 p. 1000, or 3.9 p.c. in oats, and 48.37 p. 1000, or 4.83 p.c. in Indian corn. In a hundred kilograms of rye flour there would be, therefore, 2.1 kilograms of oily matter, the inflammability of which is heightened by the heat, dispersion, and the great quantity of atmospheric air mingled with it by commotion. The case is the same with the lycopodium of which mention was made in the proceedings of the Industrial Asso. . . . Any development of electricity or gas, or any hypothesis like that propounded in the Industrial Asso. of Lower Austria, is wholly out of the question. These theories are purely speculative, and become wholly unnecessary and superfluous the moment the facts, and the chemical principles applicable to them, are properly understood.

The only way in which these explosions can be prevented is by the use of safety-lamps, such as are used in mines and petroleum warehouses, and these would not seem to afford protection against the danger from the sparks occasionally thrown off by the contact of the mill-stones. How far the fire ins. cos. ought to insist on the introduction of safety-lamps as a precautionary measure, must be left to their own judgment. The cost of such lamps is inconsiderable, and, beyond all doubt, the character of mill risks would be materially modified by making their use imperative.

1874.—Under title DUST we have already pointed out how fires may be occasioned by its presence or accumulation, on a principle altogether different from that last expounded. The learned Ed. of the *Exchange and Review* (Philadelphia) deals with the question now immediately before us in the following practical manner:

Flour-dust in mills is simply the very small particles that escape from the various portions of the mill while the grain is undergoing the different processes that are necessary first to reduce it to small powder, and then to separate the matters of the husk, etc., from those of the kernel. The dust, then, will differ in parts of the mill, though, in the boxes, pretty much of the same material will accumulate. The dust will consist largely of the same materials as are found in the ordinary Graham flour—certainly a harmless and non-explosive material at ordinary degrees of comminution. It consists of

various combinations of carbon, oxygen, and hydrogen, with a little lime, phosphorus, and alkaline materials. To this substance, however, should be added another, quite different from it in properties and composition. If a grain of ordinary wheat be examined with a moderately powerful magnifying glass, it will be noticed that the ends are covered with numerous hair-like appendages, having much the appearance of a fine wool. Formerly this was ground along with the wheat, no effort being made to separate it from the grain. Some, no doubt, was taken out in the smut mill, and much came out in the various sievings to which the flour was subjected. Now, however, the best mills have machines constructed purposely for the separation of this fuzz, and, it is claimed, with advantageous effects on the quality of the flour. With the ordinary dust, which is composed mainly of the materials of the grain, there is added, by this new process, a large quantity of a wool-like substance in an extremely fine state of division.

Among the possible ways that flour-dust may add to the ease with which fires can originate in buildings we may mention the following: It is a well-known fact that woollen rags, when soaked in oil, and then thrown aside in a heap, will frequently undergo a slow oxidation, or combustion, by union with the oxygen of the air, which will eventually set fire to any combustible matter in the neighbourhood. Now, it is possible, but not yet proved, that the wool-dust of flour-mills, collecting around the hangers of pulleys, or near the oil cups, might undergo just such cases of spontaneous heating, with subsequent combustion, and thus ignite the mill. It would be well worth the attention of mill-owners to have this question tested, viz. whether the flour-wool, when mixed with certain kinds of oil, has the property of spontaneous heating. Again, the friction of belts producing electricity, the large quantities of dust accumulating in crevices, or on joists near belts, might be ignited by electric sparks. In very warm, dry weather, such an occurrence might be possible, but not otherwise, since a large charge would be necessary, from the well-known property that points have (and the dust particles are excellent points) of discharging electric surfaces.

Woody fibre, when placed in such circumstances as cause it to lose its water gradually, may at last become so very combustible as to take fire at temperatures very far below that necessary to ignite the undried fibre. Cases are numerous where exposed timbers in flues, or wainscoting near registers, have taken fire merely by the contact of very hot air. Flour-dust is but a kind of vegetable or woody fibre, and, collecting near or in flues, gas-burners, or near steam-pipes, might be so ignited. From its very fine state of division, we can readily conceive that the heat required to drive off its water would be less, and also that it might ignite at a lower temperature. Under these circumstances it might give off such gases as carbonic acid or carbonic oxide, and so approach that state of combination called explosive.

1875.—Steam flour-mills are included in the Tariff regulations, the rates having had, in the face of the facts already stated, a continuous tendency to rise.

During this year the *Miller's Fire Ins. Co.* was founded at Birmingham; and another, the *Miller's Mutual Fire*, was projected. [MILLER'S FIRE INS. CO.]

FLOWER DE LUCE INS. OFFICE, "near Lyons Inn, for Apprenticeship, Birth, Marriage, and Service Ins.," founded 1710. The Office was formerly called the *Profitable So.* Details concerning it are given under APPRENTICESHIP INS. and BIRTH INS.

FLOWER, ROBERT T., pub. 1771: *The Radix; Logarithms*.

FLUCTUATING PREMIUMS.—The premiums to be paid by the members of the early contribution societies, alike for life and for fire, were fluctuating: depending upon the losses of the quarter, half-year, or year, according as the period might be for adjusting accounts. In the marine insurance clubs of the present day the premium is a fluctuating one. [FIXED PREMIUMS.]

FLUCTUATIONS FROM AVERAGES.—Under title AVERAGE, DOCTRINE OF, we have reviewed a series of papers by able writers wherein this question is either directly or incidentally considered, mainly in a theoretical light. It comes before us under other heads, as CHANCES, DOCTRINE AND LAWS OF; FIRE EPIDEMICS; FIRES AND FIRE INS.; STATISTICS OF; FLUCTUATIONS IN MORT.; HUMAN WILL, OPERATIONS OF; RESERVES, PURPOSES OF; RISK, THEORY OF.

FLUCTUATIONS IN MORTALITY.—It is immediately apparent on comparing, for instance, several of the Mortality T. most in use by life offices, that there are variations, more or less considerable in the results they furnish. This may arise from either of several causes, as (1) that such T. relate to different periods of time; (2) that they relate to communities differently constituted; or (3) that the original crude results have been "adjusted" by varying processes. There may, indeed, be refinements upon these causes, or altogether differing causes, as that in one community there was a greater preponderance of female lives in relation to males than in another; or, what is of greater significance, that the occupations, or circumstances in life, of the one set of persons differed from that of the other. It is sometimes answered, that the cause of such fluctuations arises mainly from paucity of numbers under observation. This, while in part true, must be regarded as an insufficient solution of the problem; and the proof of this is that in observations extending over larger communities there are still variations. Thus in the *Regis-General's* returns, which embrace the whole of E. and W., there are still variations in the deaths shown during different years—the range of variation being greater than could be produced by any variations in mere numbers resulting from emigration, or from increase of births, beyond the average, and corresponding increase of deaths at younger ages, etc.

It is clear then that we have to take a wider view for the real solution: the causes range themselves under *healthy and unhealthy seasons*, as resulting from the prevalence of fatal epidemics; or *scarcity of food*, as resulting from insufficient earnings, consequent upon badness of trade, strikes, or some such exceptional causes. We do not include herein *deficient harvests*, because the large import of grain from foreign countries which follows immediately upon even the smallest advance of price has practically remedied this at one time too-prevalent evil. [FAMINES.] A consideration of the operation of these causes will arise under FOOD, and SEASONS. If we extend our observations to different countries, new elements of variation arise, as difference in social habits; difference of

food; difference of regard to sanitary laws, and the requirements of public health generally. [PUBLIC HEALTH.]

While the preceding review leads to the conclusion that fluctuations in the mort. experienced by different communities will always obtain, we have the assurance of many, and constantly accumulating tests [MORTALITY OBSERVATIONS] that the variation is, at the greatest, still very small, and such as is most amply covered (a) by the loading of the premis. [LIFE INS. PREMS.]; (b) by the selection of lives, whereby persons in average health only are admitted to life ins. at ordinary rates [DISEASED AND IMPAIRED LIVES, INS. OF]; and all persons of peculiarly unhealthy or hazardous occupations are either surcharged or entirely rejected [MEDICAL SELECTION]. [OCCUPATIONS]. In the practical operations of life ins., the knowledge that fluctuations in the rate of mort. do arise has led to the adoption of precautions beyond those already enumerated, viz. (c) the formation of reserves, beyond the bare requirements of the life fund properly so called [RESERVES, PURPOSES OF], and (d) the limiting the amount to be retained by an office upon any one life [RISKS, LIMITS OF]. Some of the points here involved are among the most interesting, as also among the more important involved in the practice of Life Ins.

FLUES.—Among the Etruscans and Romans the fireplace became the family altar. The "sanctuary of the hearth" (*foci penetrales*) was the centre of Roman home life. Here were enshrined the gods who watched over the house. Near the common fire was spread the family table, to which, in his country home, even the dissolute Horace looked with longing: "O, evenings and dinners fit for gods! which I and mine enjoy in the presence of my household deities."

We borrow this brilliant exordium from one of the able writers in the *Chronicle*, N.Y. What we have to say of Fireplaces, Flues, and Stoves, is of a far less poetic, though it may be of a more practical nature. The simple fact is that a very considerable portion of the fires which render homes desolate result from disregard—mostly ignorant disregard—of very simple precautions.

1867.—The Fire Ordin. passed by the Common Council of Lond. this year provided (Art. xi.): That all Constables make Enquiry of the Security of Hearths, Ovens, and Stoves, and Places for laying Fire Ashes in, twice every year. [FIRE PROTECTION.]

1853.—Mr. Wyatt Papworth, Surveyor to the *Alliance*, pub.: *Notes on the Causes of Fires; or which is the Safest of various Methods of Warming Buildings?* wherein will be found many suggestions of the greatest practical ability.

1865.—The number of fires in London during a period of 33 years now ending, directly traced to defective flues, was 2268, or nearly 8 p.c. of all fires the causes of which could be ascertained.

1867.—Nearly all the witnesses examined before the Select Parl. Committee on Fire Protection bore testimony that badly-constructed flues were a perpetual source of danger. The same before the Committee of 1862.

1872.—Those who desire to know the more modern practical remedies may with advantage consult Shaw's *Fire Surveys*, pub. this year. See especially pages 56 and 69.

1873.—The *Ins. Times* of N.Y. contained the following regarding the *United States*:

When will the various fire cos. of the U.S. be able to adopt as a rule that which is rigidly enforced in the "old country" [in theory, we wish it were in practice]—that no stove pipe nor other heating apparatus shall pass within *fourteen inches* of any woodwork? When this is carried out in America, one-half of the fires will entirely be got rid of. This one rule would do more to prevent fires than any other that we could suggest. It is a prevalent idea in every part of America that two inches clear of the woodwork is quite sufficient for safety with any stove pipe. There never was a greater mistake. What would a surveyor of any fire co. in the U.K. think of finding, in a private dwelling-house, a large stove in the parlour, red hot day and night, with the pipe going up through the ceiling and floor into a bed-room over it, to heat that bed-room with the metal pipe passing through it; and the laths of the ceiling and boards of the floor not two inches clear of that pipe? Would he accept such a risk in a house of stone and brick, with a slated roof? Certainly not. And in the U.S. such risks are taken in tens of thousands over the entire States, and counted as A1—first-class risks. Is it not high time for our Fire Cos. to place a check on these dangerous modes of heating houses? They have themselves to blame for this evil, and the extent to which it has grown. They appear never to have tried to prevent it. And now, it is about too late to begin to do it. Still the effort in this direction ought to be put forth. It would teach the public the danger arising from their system of heating dwellings and stores, and would ultimately prove very effectual in lessening the number of fires which occur.

The immunity which *Paris* enjoys from fires may prob. be traced to the operation of wise municipal regulations regarding the construction of fireplaces and chimneys as follows:

Art. 1. The construction of fireplaces or smoke-flues in party-walls, or in walls separating adjoining or contiguous buildings, whether the buildings belong to the same owner or not, is absolutely prohibited.

2. The construction of smoke-flues in partition-walls is allowed, provided partition-walls built in rubble masonry shall be not less than 40 c. m. (15½ in.) thick, including plastering or in brickwork not less than 37 c. m. (14½ in.) thick, including plastering.

3. The smoke-flues in said walls shall be built with brick, or with earthenware blocks, which may be tied to the materials of the walls with proper toothings. Earthenware or plaster pipes for smoke-flues shall not be built into these walls, nor shall smoke-flues be built in rubble walls plastered around a movable core.

4. All smoke-flues having an area of less than 60 c. m. (23½ in.) in length by 25 c. m. (9½ in.) in width shall have an area of at least 4 sq. decimetres (62 in.) super. The short side of a flue shall not

be less than 20 c. m. ($7\frac{1}{2}$ in.), and the long side shall not exceed in length the short side by more than one-fourth. The interior angles of the flues shall be rounded off at a radius of 5 c. m. (2 inches). The area thus occupied will be computed as being a portion of the total area above required. The piers between the interior of the flues, and the openings for either doors or windows adjoining, shall be of masonry not less than 45 c. m. ($17\frac{1}{2}$ in.) thick, including plastering. If the said piers are built of wrought stone or brickwork, then the thickness may be reduced to 25 c. m. (9 $\frac{1}{2}$ in.).

5. Smoke-flues not built inside of walls shall be allowed only if built against piers of masonry or against stone walls having at least 40 c. m. ($15\frac{1}{2}$ in.) in thickness, plastering included, or against brick walls 22 c. m. ($8\frac{1}{2}$ in.) thick, or in the upper story against brick partitions 11 c. m. ($4\frac{1}{2}$ in.) thick. Smoke-flues thus built shall be firmly tied to the supporting pier or wall. Smoke-flues having an area of 60 c. m. ($23\frac{1}{2}$ in.) by 25 c. m. (9 $\frac{1}{2}$ in.) may be built in plaster work.

6. The front sides and withes of smoke-flues, built either in the walls or backed up to same, shall not be less than 8 c. m. ($3\frac{3}{16}$ in.) thick, including plastering.

7. Smoke-flues shall not deviate from the plumb line more than 30 degrees. They shall have an equal area their whole height, and shall be easily accessible at the top.

8. The above regulations do not apply—1st, to smoke-flues placed outside of dwellings; 2nd, smoke-flues of stoves, provided the smoke-flue does not extend further than the room in which the stove is placed; 3rd, smoke-flues of workshop fires, provided said flues do not extend into any dwelling.

See BUILDING ACTS; FIRE PROTECTION.

FLUX (from *fluo*, to flow).—A discharge; another term for diarrhoea. *Bloody Flux*, so prevalent a cause of death in the early B. of Mort., is synonymous with dysentery.

FLUXIONS.—A method of calculation based on the idea of motion. In applying the method of Fluxions to mathematical investigation, the procedure is precisely the same as in the Differential Calculus; from which it differs in no respect save that of notation. The method was invented by Sir Isaac Newton; and his notation was adopted by all English writers, and long obstinately adhered to, although the notation of Leibnitz, the inventor of the Differential Calculus, possesses over it many advantages, particularly in the more abstruse theories of analysis.—Brande's *Dict. of Science*.

Many works on the subject have been written—the best is prob. that of Maclaurin, pub. in Edin. in 1742. Sir Isaac Newton's work was translated by Colson and pub. in 1736. [DIFFERENTIAL CALCULUS.]

FOARD, J. W.—Ins. Commissioner of the State of California. With a conscientious desire to do his best for Ins. interests in that State, he has yet incurred much censure in regard to several of his measures. He has pub. (1873): *Ins. Laws of the State of California. A Compilation of the Statutes in Force on the First Day of Jan. 1873, Relating to and Governing the Transaction of Ins. Bus. in the State*. A most useful compilation, to which we are indebted for much information not at our command when we penned our brief notice of that State.

FÆNUS NAUTICUM [i.e. *Nautical Usury*].—Is a species of advance of money at maritime interest, differing from advances on *Bottomry* or *Respondentia*. It is a loan made to a merchant or shipper, not on the ship or goods only, as in the other cases; but on the mere hazard of the voyage itself, with a condition to be repaid with extraordinary interest. We have already given a detailed account of its various phases in our art. *BOTTOMRY*. This species of loan, says Park, "opened a door to gaming and usurious contracts, especially in long voyages." The Act of 1746—19 Geo. II. c. 37—had a tendency to check such transactions. The loan was more generally known at one period by the designation of *USURA MARINA*, under which title we shall have occasion again to advert to it. This species of contract was long entirely prohibited in *France*.

1698.—There was pub. by the celebrated Dutch civilian, Gerard Noodt, a treatise: *De Fœnere et Usuris Libri tres*. [USURY.]

FÆTAL LIFE.—Dr. Thomas Jameson, M.D., in his *Essay on the Changes of the Human Body at Different Ages*, etc., 1811, says:

The age of man has usually been considered as commencing at birth, but his primitive existence for the nine months succeeding conception is an important portion of his life, which should not be omitted as part of his age, since it lays the foundations of the future machine, and is attended with more remarkable changes of structure than appertain to any other period of human existence.

It would be well if our system of birth regis. enabled a record to be kept of the number of births occurring before the assigned period.

FÆTICIDE.—The destruction of the fœtus in utero, commonly called criminal abortion.

FOG.—In Meteorology, a cloud resting near the surface of land or water;—an earth cloud. Fogs, in general, are the consequence of the cooling of atmosphere. When humid air is cooled, a part of its moisture separates in the form of visible vapour or fog. During the heat of the day the sun generally disperses the fog, because the quantity of moisture which the air is capable of holding becomes more considerable in proportion as its temperature is increased: and thus as the temperature rises the globules of water constituting the cloud gradually assume the form of true vapour, which is always transparent and invisible.

In calm weather the surfaces of rivers, lakes, etc., are frequently in the morning covered with fog. The reason is this: during the night the air is colder than the water, the strata of air in contact with the water are consequently heated and become saturated with moisture. The mixture of the vapour with the air, together with its higher temperature, renders it specifically lighter. It rises in consequence, and, mixing with the cold air in the superior strata, is cooled and precipitates moisture. The cloud or fog resulting from this precipitation can only rise to a small height, because the uniformity of temperature is soon restored. Hence it is easy to see how winds or agitation of the air prevent the formation of fogs over the surface of water.—Brande's *Dict. of Science*.

The prevalence of fogs very much affects the health of the people, as we shall have occasion to show, particularly in cities; and prob. nowhere more than in London. Fogs and epidemics often accompany each other; they have, says a writer in the *Builder*, it may be, a common origin, or perhaps the one is the cause of the other. Dr. Prout, in his *Bridgewater Treatise*, especially refers to a certain poisonous gas—seleniuretted hydrogen—which exists in the atmosphere during a fog, the smallest atom or bubble of which, when inhaled by the nostrils, excites pain; this is followed by catarrh and pains in the chest. The height of the fog is greatly determined by the nature of the subsoil. If it is clayey, it stands high; and low, if it be of sand or gravel. A London fog does not in general extend much beyond the height of the houses. During its prevalence one may, by ascending St. Paul's Cathedral, obtain a clear atmosphere, while underneath the dark vapour is rolling like a sea, through which the spires and steeples rise like the masts of stranded wrecks. London fog is not equal in density in all places; a long depressed line marks the course of the Thames, and the deepest darkness hangs over the most crowded neighbourhoods. Before the Act of Parl. was passed requiring the London factories to consume their smoke, the fog was particularly dense in the localities of the great breweries. London fogs derive their tint and odour from coal-smoke.

It is generally considered that those fogs which have a peculiar taste, and cause the eyes to smart, owe their disagreeable properties to gases and vapours produced by the combustion of fuel, and from this source the atmosphere is charged with carbon, sulphurous, nitrous, and pyroligneous acids. A moderate wind will usually break up a fog, but an increase of temperature without wind tends to increase its density. It has often been observed that during the middle of the night until early in the morning London is free from fog, which, however, sets in as soon as the fires are lighted; sometimes it clears away for a short time at noon, and increases in density as evening approaches and the gas is lighted. London fog has also a peculiar tidal motion, which tends down the river towards the marshes, and an extraordinary amount of electricity frequently accompanies thick, driving fogs.—*Builder*.

In the equinoctial regions, fogs sometimes continue during a considerable part of the year. Humboldt relates that *Lima* is often covered with a fog half the year, especially in the mornings and evenings; and that along the whole of that coast fogs supply the place of rain, which is extremely rare. In the Polar Seas thick fogs prevail even during the warmest months—prob. from the air being warmer than the water;—and they are so dense that objects frequently cannot be distinguished at the distance of a few yards—hence the loss of lives and shipping which too frequently results.

The following are a few instances of remarkable fogs. It sometimes has happened, though rarely, that fogs have occurred from causes not understood. The dust, ashes, and vapours of volcanos sometimes occasion peculiar forms of fog, extending over large and even distant districts. The dry fogs or hazes, in which no precipitated moisture is present, have as yet been very imperfectly investigated.

1783. The whole of Europe was covered with a fog during nearly 2 months.

1822. May 22. About 5 o'clock in the afternoon a fog covered Paris and the neighbourhood, "which had the character of nitrous gas." It continued about an hour.

1873. Dec. 8—13. Dense fog during this period over London, causing many accidents and considerable mort. to men and cattle. It was believed that this mort. was occasioned by inhaling the poison indicated by Dr. Prout, and already spoken of. The mort. in Lond. during the week was 780 above the average. Many of the most valuable beasts at the ann. Cattle Show, Islington, died.

FOG FEVER.—This term we believe originated from the incident of the fogs of Dec. 1873, referred to in the preceding art. It appears to be applied to cattle more than to human beings. The *Sanitary Record* gave the following, which may account for the fever symptoms:

During the heavy fog the oxygen of the atmosphere is diminished about 0·1 per cent. and the carbonic acid is increased about 0·03 per cent., which is a variation sufficient to work endless mischief should the visitation last for a length of time. During some fogs we are informed that the amount of carbonic acid in the air will be multiplied five times over what is usual, and researches also prove that fogs contain a very large proportion of ammonia. In fogs of this description the eyes begin to smart, the palate to be sensible of a peculiar taste, and the respiratory organs will be seriously affected. What else can result when, as is well known, we are simply breathing the smoke which has been pressed down to the level of our mouths by descending currents of air. But the worst of it is that there is apparently no escape from such a fog; it invades every corner, and increases in unwholesomeness, until there comes a dispersing wind to blow away the watery vapour with its contained evils. While the fog lasts we cannot help breathing all the acid impurities which we know act so very injuriously even on our building stones.

Warm and well-ventilated rooms and buildings are said to be the only known remedy.

FOG SIGNALS.—The frequent disasters to shipping around the coasts of the U.K., as also on the north-east coast of the U.S., had led to the admitted necessity of the more general adoption of efficient Fog Signals. The lighthouses, so useful in clear weather, become useless in fogs, except in so far as they may be made the stations for fog signals. Their height, which is an advantage in fine weather, becomes a drawback in fogs. The illumination is too frequently altogether above the line of the fog, and cannot penetrate it. Improving the efficiency of Fog Signals has during the last few years received marked attention.

1874.—Prof. Joseph Henry, chairman of a committee on Fog Signals in the U.S., communicated a number of interesting obs. made by him on the phenomena of sound as relating to the subject in hand. In studying the subject of Fog Signals, it becomes a question of importance to ascertain whether waves of sound, like those of light, are absorbed or stifled by fog. On this point observers disagree, and to settle this question definitely was one of the objects of his investigation. Prof. Henry considers it highly probable that fog does somewhat diminish the penetrating power of sound, but only to an exceedingly minute degree. Among the principal causes of the diminution in this penetrating power are enumerated the varying density of the atmosphere, the direction of the wind, and the reflexion of the sound wave from neighbouring objects, such as hill-sides, forests, houses, etc. According to General Duane, it appears that although a reflector, in the focus of which a steam whistle or ordinary bell is placed, reflects the sound a short distance, it produces little or no effect at the distance of two or three miles. The Fog Signals have frequently been heard at the distance of twenty miles, and as frequently cannot be heard at the distance of two miles, and this with no perceptible difference in the state of the atmosphere. This case, although quite abnormal, seems to be sufficiently well authenticated to justify its pub. under the authority of the Lighthouse Board. The instruments employed as Fog Signals by the U.S. Board are mainly three, all constructed on a principle of resounding cavities in which the air is the sounding body. These instruments are, first, the reed trumpet, the air being condensed by a caloric engine; second, the siren trumpet, the revolving disk being driven by steam from a high pressure boiler; third, the ordinary locomotive whistle blown by steam from a high-pressure boiler.—*Harper's Magazine*.

1875.—Mr. A. H. Smee, in a letter to the *Times* (Lond.) in Sept. this year, said—"I have noticed that sea fogs appear to be of two descriptions, one in which sounds are distinctly audible, the other, and far more dangerous, when sounds are muffled or totally obscured. The phenomenon of audibility or inaudibility is not affected by the presence or absence of wind."

During this year there was perfected by Capt. R. E. Harris, the "Phonometer," an instrument by means of which a ship can not only make known her presence, but indicate the course she is steering. [PHONOMETER.]

As a general fog signal, to be placed in fixed localities, the "Siren" has been said by Prof. Tyndall to surpass all others. The instrument has received the name of Siren from the similarity in the mode of its operation to the acoustic apparatus well known by that name. In the signal here alluded to the sound is produced by means of a disk with twelve radial slits, which is made to rotate in front of a fixed disk of similar construction. The moving disk makes 2800 revolutions p. minute, and in each revolution there are twelve coincidences between the positions of the slits of the two disks. Through the openings thus made steam or air at high pressure is allowed to pass, so that there are actually twelve times 2800 (or 33,600) puffs of steam or compressed air every minute. The rapid sequence of these impulses causes a sound of very great power, which a cast-iron trumpet, twenty feet in length, concentrates, and the blast goes out as a sort of sound beam in the required direction. This Siren was sent over to England by the American Lighthouse Board, at the request of Trinity Corporation, to be tested with other instruments in the experiments at the South Foreland (1875). This form of sound signal has been formally adopted for the British coasts. The Siren can be heard in all sorts of weather at from two and a half to three miles, and in the Trinity House experiments was, on one favourable occasion, heard 16½ miles at sea.

FOGERTY, JOHN, Limerick.—Adjuster of Fire Losses. He was originally an architect, but afterwards acted for a long series of years for the *West of England*, and other ins. offices, in settling fire losses in Ireland. He gave evidence before the Select Parl. Committee on Fire Protection which sat in 1867. He considered it highly necessary for the protection of life and property that there should be a careful inspection of buildings during their progress, as to party-walls, etc. He would approve of an inquiry into the causes of fires in every case. He had discovered many fraudulent claims. "I should say that at least *one-fifth* of the whole fires I have anything to do with are not fair cases." Corn-mills have particularly suffered. "If every insurer were certain of a searching inquiry being held, he would be very loath to do anything that would be unfair, and run so great a risk." "I find very little uninsured property burned at all, not *one* p.c. in my own practice." "Would you leave it to the judgment of one man, or would you have a jury?—I would have no jury" (4718).

FOGGO, DAVID, was Act. and Sec. of *European Life* (No. 1) in 1837, or earlier, down to 1851.

FOGGO, GEORGE, read before the Social Science Congress at Plymouth, 1872, a paper: *The Policy of Restrictive Measures in Quarantine as applied to Cholera and Cattle Plague*. This paper, which contained some useful suggestions, has since been published in pamphlet form.

FOLEY, P. J., Man. of *Pearl Life*, of which he was the principal founder in 1864. In 1875 he received a handsome testimonial from the superintendents, agents, etc., of the Co., in token of its advancing success under his management.

FOLEY, THADDEUS, F.I.A., was Act. and Sec. of *Mariners and General* from 1845 to 1848. Afterwards Act. and Sec. of *Lond. and Prov. Joint-Stock Life* in 1849.

He pub. in 1848 a pamph.: *An Investigation of the Profits which might be realised by Life Assu. Cos.* [PROFITS.]

FOLKESTONE MARINE INS. CO.—Projected at Folkestone in 1865, on the principle of being limited by guarantee. We are not aware if it matured into a co.

FOOD.—It is generally considered that the food of a people exercises an influence upon the health and strength of that people; and this admission lends force to the conclusion of Boudin, that man is physically the expression of the soil on which he lives. Perhaps this is less true of the British than of most other nations. But in times past at least it must have had its application here. It is, however, no part of our present purpose to regard the philosophic aspect of the subject. Believing that (1) the *quality* of our food is essential to health, and knowing that upon the *quantity* and its consequent cheapness depend many social problems, such as (2) the number of marriages; (3) the consequent number of births; and (4) the progress of the population, we find in the subject links to questions treated in these pages which we cannot disregard.

The first essential in the matter of Food appears to be its *quality*; hence all *adulteration* of it is an offence against health, and in that sense the happiness, of the whole people. It appears to have been so regarded almost from the beginning. Adulteration, in its legal sense, is the act of debasing a pure or genuine commodity, for pecuniary profit, by adding to it an inferior or spurious article, or by taking from it one or more of its constituents. The term is derived from the Latin *adultero*, which in its various inflexions signifies to defile, to debase, to corrupt, to sophisticate, to falsify, to counterfeit, etc.—*Ency. Brit.* We purpose to review the law upon this subject past and present in our own country.

The securing of a proper supply, i.e. *quantity*, of food is an equally important consideration to the preservation of its quality. The efforts made in this direction in all countries in the first instance are impelled by the necessity of existence. It becomes in time a duty and an office of statesmanship to secure this end. The efforts made in this behalf in our country constitute one of the more remarkable features of our legislation. At this point it is but a step into the domain of Political Economy. We have no intention of taking that step; yet we are called upon to review the contents of our stat. book as almost the only means of obtaining the facts essential to be known.

It has been remarked that nearly all the great *Epidemics of Fever*, more especially of typhus, have occurred during seasons of scarcity and want. They are in fact associated with *Famine*. In some instances the famine has been general, owing to failures of the crops, and the epidemics have been widespread: while in others the scarcity has been the result of artificial causes, such as strikes, commercial failures, sieges, etc., and the epidemics have been circumscribed. But whatever may have been the cause of the scarcity, it has been a common observation in many epidemics that the fever has raged among the poor in a degree proportionate to the privations they have endured. This view may be enlarged by comparing our T. OF FAMINES with the T. OF FEVERS, or perhaps more effectively with the T. OF PESTILENCES AND PLAGUES, to be hereafter given. It was especially observable during the Irish potato famine: those persons who had been reduced by insufficient food were invariably attacked. It is too patent in our observations of the poor wherever they may be assembled.

Corn has provided a common article of food from the earliest ages of the world; and the baking of bread was known in the patriarchal ages.—See *Exodus* xii. 15.

1184.—30 Henry II. Madox, in his *Baronia Anglica* (c. 14), tells us that in this year 33 cows and 2 bulls cost but £8 7s. money of that age: 500 sheep, £22 10s., or about 10½d. per sheep; 66 oxen, £18 3s.; 15 breeding mares, £2 12s. 6d.; and 22 hogs, £1 2s.

1203.—3 John. The first stat. regulating the sale of bread, as to its weight and price, was the *Assisa Panis* of this year. The chief justiciary and a baker commissioned by the King had the inspection of the assize.—*Matthew Paris*. We confess to never having been able to find a copy of this; but suspect it may be the earliest quoted by Stow, viz. *The Ordin. for the Assize and Weight of Bread in the City of Lond., antiently set, according to the price of wheat by the quarter, the first item of which is the following:*

The Price of a Quarter of Whete being 3s.

The ferthing Simnel poise 15 ounces & di. qt.

The ferthing whyt loof coket poise 17 ounces di. & ob.

The ob. whyt loof poise 35 ounces & a peny.

The ob. whet loof poise 52 ounces di & peny ob.

The peny whet loof poise 105 ounces & di. q. & ob.

The ob. whet loof of all graynis poise 7 ounces & 2 d.

And this arrangement repeated for each advance of 6d. in the price of a quarter of wheat, up to 20s. when:

The Quarter of Whete at 20s.

The ferthing simnell 2 ounces 3 & a qt.

The ferthing whyt loof coket 4 ounces 3 qt. 3 ob. q.

The *ob.* whyt loaf 9 ounces 3 qt. 1 d. *ob.*

The *ob.* whete loaf 14 ounces & di. qt. 2 d. qr.

The peny whete loaf 29 ounces qt. 3. 2 d.

The *ob.* loaf of all grayins 19 ounces 3 & di. q. *ob.*

Item, the halfpeny loaf whyt of *Stratford* must wey 2 ounces more than the halfpeny whyt loaf of *London*.

Item, the halfpeny whete loaf of *Stratford* must wey 3 ounces more than the halfpeny whete loaf of *London*.

Item, the peny whete loaf of *Stratford* must wey 6 ounces more than the peny whete loaf of *London*.

Item, three halfpeny whyt loofes of *Stratford* must wey as much as the peny whete loaf.

Item, the loaf of all graynis, that is to say, the whete loaf must wey as moch as the peny whete loaf and the halfpeny whyt loaf.

At this date, and for fully a century later, the bakers who supplied *Lond.* with bread mostly lived at *Stratford le Bow*, *Essex*. At a later date *Bromley* [*Bremble*], also by *Bow*, but nearer to *Lond.*, was the seat of many bakeries. The bread was taken to the *City*, to the market in *Bread Street*, in carts, and was often seized on its way for being of light weight or made of unsound materials. (See 1302.)

Wheat at one period of this reign is quoted at 1s. p. qr.

1266.—51 Henry III. The Assize of Bread was regulated by this stat., of which we find several versions. "The price of bread and ale shall be according to the prices of corn."

Barley during this reign was 2s. p. qr.; oats 1s.; "a good horse" 10s.

1270.—54 Hen. III. The *Chronicon Preciosum* states that this year wheat was so dear that it was sold at £4 16s. the quarter, and sometimes at 16s. the bushel, which is at the rate of £6 8s. p. quarter; but no cause is assigned for this immoderate price, which may be considered as equal to £40 p. quarter in present money.

1276.—Edward I. Besides Acts of Parl., passed in regular form, there were many other modes whereby the pleasure of the Sovereign and his advisers, as also the commands, were promulgated. These were severally by Charters, Acts of Grace, Letters Mandatory, and Ordinances—the latter becoming in due course more popular—issued on special emergencies. We shall have to glance at these: for the stat. book is seen to be an incomplete authority to follow. The King at this date commanded the Mayor and Aldermen of *London* to make statutes for governing the Hucksters of Fish and Fowl. A record of what was done under it is to be found in the *Horn Book* of the Corp. of the *City*, under the title of "*Statuta de Poletria et Pisce facta tempore Maioratus Henr. de Waleys*," viz.:

*Tempore Henrici de Waleys, etc., i.e. in the time of Henry de Waleys, Maior of Lond., Nicolas de Winton, Henry de Coventre, Sheriffs by the Command of the Lord the King, with the assent and consent of the Great Men of the Kingdom and Citizens aforesaid, it was Ordained that no Huckster of Fowle [Mango avium] go out of the City to meet them that bring Poultry to the City, to make any buying from them; but buy in the City, after the buyers of the Lord the King, of the Barons, and the Citizens, have bought and had what shall be needful for them, namely, after 3 o'cl. and not before. And then let them buy thus: That they may afford an Hen of the better sort for 3d. *ob.* And two Pallets of the better sort for 3d. *ob.* And one Capon of the better sort for 2d. *ob.* And from *Easter* to *Whitsuntide* a better homefed Goose for 5d. And from *Whitsuntide* to *St. Peter's ad Vincula*, for 4d. And from that Festival throughout the whole year always, one of the better sort for 3d. Also for a Wild-Goose of the better sort 4d. Three young Pigeons of the better sort for 1d. One Mallard for 3d. *ob.* And two Cereels for 3s. And two Wydch [Wild Ducks] for 3d. *ob.* And four Begaters 1d. And a dozen Larks 1d. One better Peasant 4d. One better Botor for 6d. A better Heron 6d. One better Corlune 3d. One better Plover 1d. One Swan for 3s. One better Crane for 3s. A better Peacock for 12d. A better Coney with the Skin 4d. And without the Skin 3d. The flesh of a good Hare 3d. *ob.* One Kid from *Christmas* to *Lent*, of the better sort for 10d. At other times of the year for 6d. One better Lamb between *Christmas* and *Lent* for 6d. And at other times of the year for 4d.*

It is also Ordained that no Huckster of Fish, or Fishmonger who sells again to others, go out to meet those that bring or carry in Fish to the City, to make a Forestal thence; nor have any partnership with a stranger, who brings Fish from the Sea to the City; but let them seek for Fish in their own ships, and permit Foreigners to bring it, and to sell when they are come in their own ships. Because by such partnership they who are of the City, and have known the state of the City, and the Defect of Victuals, will hold the Fish at a greater Dearness than Foreigners who shall not have known it. And also that they who are of the City, when they cannot sell as they will, lay it up in cellars, and sell dearer than the Strangers would do if they came without partnership, and knew [not] where they might be barbourd.

Nor let them buy anything in the City until the King's Servants, etc., have bought, and not before 3 a cl. And if they who have brought Fish shall come after 3 a cl., let them not sell that day, but let them sell on the morrow morning. And if they expect more, let the Fish be taken into the Lord King's hand, and let them keep no fish, except Salt Fish, beyond the second day of their coming. Which, if it shall happen to be found, let them lose their Fish, and be at the mercy of the Lord the King to fine them.

And thus let the Hucksters, i.e. the Fishmongers, buy, that they afford,

A better Plaise for 3d. *ob.*, a middling one for 1d., and others less, as consequently they seem to be worth.

Also 12 better Soles for 3d., and others as they are worth. Also, a better Conger for 12d., others as they may be worth.

A better Turbot for 6d., and others as they are worth.

A gallon of Oysters for 2d.

A better fresh Salmon between *Christmas* and *Easter* for 5s. And after *Easter* for 3s. And others middling and less as they are worth.

One Lampred of *Nauntes*, in their first coming, and of the better sort, for a month, for 16d. And after a better Lampred for 8d. And after *Easter* for 6d.

Also, one better fresh Lamprey of *Severne* or *Thames*, between the Purification of the Blessed Virgin *Mary* and the middle of Lent, for 4*d.* And after the middle of Lent to *Easter* for 5*d.* And let the Lampreys of *Nauntes* be sold in the Publick Market wherein they are accustomed to be sold, and not in Houses, *unless they be hid by night.*

Also let Merchant Strangers come to the City, make their abode there, and do as they have been wont to do.

We have greatly curtailed the list of fishes enumerated in the Ordin., partly on the ground of space, and especially because the names they bear therein are now unknown to us.

1298.—26 Edw. I. A mandate for the preservation of peace within the City was issued by the King, addressed to Henry le Galeys, Mayor, which recites and ordains as follows :

Edward by the Grace of God, etc., to the Mayor and Sheriffs of Lond., greeting. Forasmuch as we have heard that the Bakers, and Brewsters and Millers, in the City aforesaid, do frequently misconduct themselves in their Trades. . . . We of our Counsel, wishing to apply a fitting remedy to all the premises, and to strike both them and others with fear of so offending, do command you, and strictly enjoin, that you will so chastise such Bakers, Brewsters, and misdoers, with corporal punishments, and so visit the other offences, at your discretion, that they may excite in others in like case a fear of so offending. And that all Corn to be ground at Mills within the City aforesaid, and without, shall be weighed by the Millers, and that such millers shall answer in like weight in the flour coming therefrom. And to the matters aforesaid, and all other things which unto the office of the mayorality of the same City, and to the preservation there of our peace, do pertain, you are to cause to be inviolably observed. Witness myself at York, the 28th day of May, in the 26th year of our reign.

1302.—30 Edw. I. The Bakers of London were first allowed to sell bread in their own shops this year. Previously all the bread was sold in Bread Street (off Cheapside).—*Stow.* The London Bakers Co. was incorp. 1307.

During this reign a fat capon sold for 1*d.* ; a goose for 4*d.* ; and a lamb for 4*d.*

1307.—Edward II. In the *Horn Book* of the Corp. of Lond. there is (p. 234) under the title of :

Incipiunt Statuta et Provisiones Civium, London, de Assisa Panis, the following :

Secundum Consuetudinem Civitatis, London, etc.—According to the Custom of the City of Lond., an Assay ought to be made of Bread every year, after the feast of *St. Michael*, by four discreet and Sworn men, chosen for this purpose : and according to the proportion of the common weight of that Assay, the Bakers ought to bake their loaves throughout the whole year : namely, so that if afterwards Bread can be sold dearer than it was at the making Assay, then the bread ought to be of less Weight than it weighed in the Assay. And if it were of less price, then it ought to weigh more. Only we ought cautiously to provide that accordingly to the Quantity whereby the Corn increaseth in Price or decreaseth, the bread increase or decrease in Weight.

The exact manner of making the Assay, we learn from the same authority, was as follows :

That the said four Sworn men should buy three quarters of Bread Corn [or meal] in the Sack upon the pavement in the 3 markets : one at *Grassechurch*, another at *St. Botolph*, Billingsgate, and the third at *Queenhith*. Of which they were to make a *wastell*, and another Loaf less fine (which I think they called *Cokeft*), and after they had baked these Loaves with the greatest diligence, then they went and presented them hot before the Maior and Aldermen in Guild-Hall. And thus hot they were weighed. And then (saith the Statute) the buying of the Bread Corn shall be considered : and 8*d.* for every qr, shall be allowed to the Baker for his Charges. The selling also of the Brann shall be considered, and shall be withdrawn out of the sum that the Meal was bought for. And if [after divers exact Rules for weighing the Bread] there be more loaves in number than there shall remain halfpence in the sum of the meal bought, when the charge is allowed, then let there be a partition of the weight of those loaves remaining over and above. And so every loaf shall be made of just weight. And if there be fewer loaves than the number of halfpence in the sum the meal was bought for when the charge is allowed, then let it be withdrawn from the weight of each loaf equally, so far until there result so many loaves of equal weight, as there are halfpence in the number of the sum the meal was bought at when the charge is allowed.

If there shall be more loaves than the number of halfpence, let the part exceeding be taken from the number of Loaves, and see the how manieth part it will be to the number of halfpence ; and according to that proportion let the Weight of each Loaf be augmented. For example sake, if there be 20 halfpence and 24 loaves, every loaf at the weight of 40 shillings, then the number of loaves increaseth above the number of halfpence, which are but 20 ; and it is the fifth part, since 5 times 4 make 20. Therefore the weight of every loaf increaseth by the fifth part of its weight ; and the weight of the loaf was 40 shillings, whose fifth part is 8 shillings. Therefore 20 loaves shall be each loaf of the weight of 48 shillings. And so each loaf shall be of just weight.

If there were more halfpence than the number of loaves, we must see the how manieth part was the number increasing of the number of loaves : and if it were a third part, a fourth part is to be lessened from every Loaf ; and if it were a fourth part, a fifth part is to be lessened. For example, if the number of halfpence were 24 and the number of loaves 20, then is the number increasing to as before, which is the fifth part of 20. Therefore each loaf decreaseth of a 6th part of its weight. If the weight therefore shall be 40 shillings, it shall be 33 shillings and 4 pence. And so the number of loaves is equalled to the number of halfpence, and the weight is the same.

While this explanation helps us in regard to certain quotations which arise in the denomination of values in this art., it has not the advantage of making itself clear to the understanding of any ordinary reader. We must be content to take it as we find it. We next advance to another stage of the proceedings taken by the City authorities in the matter of bread.

There were four principal Halimotes in the year, when all the City Bakers were bound to meet together : whereof the first was kept after the feast of *St. Michael*, for the profit of the City and the kingdom. That the Bakers assembled together take and know their new Sheriffs, and retain in their memories the statutes of the City belonging to the Bakers, and receive the Assay of Bread.

The second Halimote was held after the Nativity of our Lord : that if there be any

transgression made in the first Term of the year it may be there without difficulty more fully amended.

The *third* Halimote was accustomed to be called together after the close of *Easter*: as well for the coming of the King as of the nobles of his kingdom; lest there might seem to fall out a want of this kind of service—that is, in a convenient supply of the City and Inhabitants with good Bread.

The *fourth* Halimote was after the Nativity of *St. John Baptist*: that what should be solemnly appointed by the Common Council and Providence (sic) of the City in the first three terms, in this fourth term might be profitably confirmed. So that the goodness of so great a work might not run to Disprofit by Ignorance or by Negligence.

To these four Halimotes all the Bakers must come. And if they come not, nor excuse and essoin themselves reasonably, they forfeit to the Sheriff 21*d*.

1310.—3 Edw. II. We learn from the *Memorials of Lond.*, that on Monday next before the feast of St. Hilary (13 Jan.) this year, the bread of Sarra Foting, Christina Terrice, Godiyeve Foting, Matilda de Bolington, Christina Prichet, Isabella Sperling, Alice Pegges, Johanna de Cauntebrigge, and Isabella Pouveste, bakeresses of *Stratford*, was taken by Roger le Paumer, Sheriff of London, and weighed before the Ld. Mayor and Aldermen; and it was found that the halfpenny loaf weighed less than it ought by 8 shillings [or 4½ ounces]: "But seeing that the bread was cold, and ought not to have been weighed in such state, by the custom of the City, it was agreed that it should not be forfeited this time. But in order that such an offence as this might not pass unpunished, it was awarded as to the bread so taken, that three halfpenny loaves should always be sold for a penny; but that the bakeresses aforesaid should this time have such penny."

1314.—8 Edward II. At this period the King again attempted to come to the rescue of the City, by setting a "reasonable price" on Flesh and Fowl, in the Ordin. which follows:

Edwardus Dei Gratia, etc.—Edward by the Grace of God, King of Eng., Lord of Ireland, Duke of Aquitan, to the Sheriffs of Lond. Greeting. "We have heard the Complaint of the Archbishops, Bishops, Earls, Barons, and others of the Commonalty of our Kingdom, by their Petition exhibited before us and our Council: containing that there is a great and as it were intolerable Dearth, in these days, of Oxen, Cows, Sheep, Hogs, Geese, Capons, Hens, Chickens, Pigeons, and Eggs; to the no little Loss and Grievance of them and all others dwelling within the same Kingdom. For which they have besought us instantly that we would take care to provide upon this concerning some suitable remedy.

We therefore yielding to the aforesaid Supplication for the common profit of the people of the said Kingdom, as it seemed expedient to Us, have Ordained, with the Counsel and Assent of the Prelates, Earls, Barons, and others, being of our Council, in our last Parl. held at *Westminster*:

That a better sort Ox, alive, saleable, fat, not fed of grain, be sold for the time to come for 16*s*., and not above. Or that if it be fed with grain, and be fat, then to be sold for 24*s*. at most.

And that a better sort of Cow, alive, and fat, be sold for 12*s*.

A Hogg, two years old, and fat, for 40*d*.

A Sheared Mutton, fat, for 14*d*.

A fat Goose for 2*d*. 6*d*. In our City aforesaid for 3*d*.

A Capon, good and fat, for 2*d*., and 2*d*. 6*d*.

A fat Hen for a 1*d*., and 1*d*. 6*d*.

Two Chickens for 1*d*., and 1*d*. 6*d*.

Three [Four overwritten] young Pigeons for 1*d*.

Twenty Eggs for 1*d*.

And that if it happen to be found, that any persons, or any one person, will not sell these saleable things for the price appointed, as is before set forth, then the said saleable things shall remain forfeited to us. And we will that the aforesaid Ordin. from this time be firmly and inviolably observed in our said City.

We command, firmly enjoining you, that in our City aforesaid, and Suburb of the same, where ye shall see it to be expedient, that the aforesaid Ordin. be publicly and distinctly proclaimed; and that ye cause the same from time (sic) to be inviolably observed in all and each its articles, under the aforesaid Forfeiture, throughout the whole Bailiwick. And this omit by no means, as you will avoid our Indignation, and preserve yourselves without blame. Witness myself at *Westminster* this 14th day of March in the 8th year of our Reign.

This Ordin. was afterwards extended through the whole kingdom, in all Cities, Boroughs, Villages, etc. "But (in the language of *Stow*) the King was fain the next year to send a Brief of Reclamation of his former Ordin., finding it did more harm than good." It was as follows:

The King to the Sheriffs of London, Greeting: Although we lately commanded you that in each place in the aforesaid City, where it should seem to you to be best expedient, ye should cause it to be publicly proclaimed, that Oxen, Cows, Hogs, Sheep, Geese, Capons, Hens, Chickens, Pigeons and Eggs should be sold at a certain price: Because nevertheless we have understood that such a Proclamation which at the time we believed would be for the profit of the people of our Realm, redounds to their greater damage than profit: We command you, that in the said several places ye cause publicly to be proclaimed, that Oxen, Cows, Hogs, Sheep, Geese, Capons, Hens, Chickens, young Pigeons and Eggs be sold for a reasonable price, as was accustomed to be done before the said former Proclamation; Certifying all and singular that the former proclamation was not made by virtue of the Ordin. late made by the Prelates, Earls, and Barons, and Nobles, of the same Realm, and by us accepted, nor was contained in them. Witness myself at *Lincoln* the 20th February in the 9th year of our Reign.

This frank confession of errors in judgment, and overstretching of authority, in the matter of government, has a novelty about it to which we moderns are not accustomed.

1316.—10 Edw. II. Gilbert Parry was indicted and convicted for selling *maslin* halfpenny loaves of short weight in the City, "and because it was found that he had been twice drawn on the hurdle, and was now for the third time found in default, it was adjudged that he should be drawn now for the third time, and should then forswear the

Trade of a Baker in the City for ever. And he did abjure it before the Mayor and Aldermen in full Court, etc."—*Memorials of London*, p. 123. "Maslin" bread was compounded of wheat and rye flour combined. The designation is still current in the north of England.

1327.—During the reign of Edw. II., which ended this year, the following prices are quoted: A Cow, 6s.; a Hog, 3s. 2½d.; a fat Sheep, 1s. 8d.; a Sheep, 1s.; a Pig, 6d.; a fat Goose, 2½d.; a Capon, 2d.; a gallon of Ale, 1d.; an acre of Pasture, 1d.; a pair of Shoes, 4d.

1347.—21 Edw. III. The first importation of Corn into England, of which we have any authentic record, occurred this year. It is stated that wheat was imported into Wales in the 6th century. (See 1463.)

1348.—22 Edw. III. Pike, in his *Hist. of Crime in Eng.*—a work of the highest authenticity—writing of the punishments of delinquents at this period, says:

Turn where he might, the traveller could hardly fail to light upon some group which would tell him the character of the people he had come to see. Here, perhaps, a baker with a loaf hung round his neck, was being jeered and pelted in the pillory, because he had given short weight; or because when men had asked for bread, he had given them, not a stone, but a lump of iron inclosed by crust. There perhaps an oven was being pulled down, because a baker had been detected in a 3rd offence, and had been compelled to abjure trade in the City for ever. *If there were no bakers to be punished on any particular day, the pillories could never have been all without occupants.* They were used to punish the sellers of bad meat, poultry, and fish, . . . of oats good at the top of the sack and bad below, . . . and the petty pilferers of every kind.

For verification of this case see Riley's *Memorials of Lond.* (1858), p. 498.

1350.1.—By 25 Edw. III. Stat. 2, c. 1, it was enacted that Carters, Ploughmen, Drivers of the Plough, Shepherds, Swineherds, Deics, and all other Servants, should take Liveries and Wages, accustomed in the 20th year of this reign: "so that in the Country where Wheat was wont to be given they shall take for the bushel *tenpence*, or wheat at the will of the giver till it be otherwise ordained."

1360.—By 34 Edw. III. c. 20, no corn was to be transported [exported from Eng.] but to *Calais and Gascoign*. (See 1393.)

1362.—An Act regulating the price of Poultry was passed, viz. 37 Edw. III. c. 3, which was as follows: *Item.* For the great dearth that is in many places of the Realm, of Poultry, It is ordained, That the price of a young Capon shall not pass iijd., and of an old iij½d., of an Hen ijd., of a Pullet jd., of a Goose iij½d., and in places where the prices of such victuals be less, they shall hold without being enhanced by this Ordinance; and that in the towns and markets of Uplands they shall be sold at a less price, according as may be agreed betwixt the Seller and the Buyer: and Justices shall be thereupon assigned by commission to put the thing duly in execution.

During part of this reign a qr. of corn sold in certain localities for 2s.

1363.—By 37 Edw. III. c. 8, the diet and apparel of servants was regulated. We quote in brief. *Item.* For the Outragious and Excessive Apparel of divers people, against their Estate and Degree, to the great Destruction and Impoverishment of all the Land, It is ordained, That Grooms, as well servants of Lords, as they of Mysteries, and Artificers, shall be served with meat and drink once a day of Flesh or of Fish, and the remnant of other victuals, as of Milk, Butter, and Cheese, and such other Victuals, according to their Estate. . . .

A yard of the best cloth in this reign was 1s. 8d.

1365.—39 Edw. III. An Ordin. was promulgated, "as to the Sale by Hostellers and Herbergeours of bread, and horse-bread," etc., which recites:

Whereas many grievances and damages have been done heretofore unto divers folks repairing to the City of Lond., for that the hostellers and herbergeours of the same City have made horse-bread to sell in their houses, at their pleasure; the which has been of no assize, and not of the value that it ought to be. And also some hostellers and herbergeours do go into Southwerk and elsewhere, where they please, to buy horse-bread, and there buy it dry, and at the rate of 18 loaves for 12, and then sell it to their guests at one halfpenny the loaf, whereas 4 such loaves are really not worth a penny; to the great scandal of the said City, and to the great damage of the common people.

Therefore the Mayor and Aldermen, with the assent of the commons, by way of remedy, ordered that the persons aforesaid "shall buy bread for such guests, and for their horses, of the Common Bakers of the said City, each loaf being stamped with the mark of the Baker of whom the same was bought; that so, every one may see that the bread is of the right assize, and of the real value that it ought to be."—*Memorials of Lond.* p. 323.

1377.—Richard II. Prices during this reign. A qr. of wheat, 2s.; an ox, 8s.; a cow, 5s.; a gallon of wine, 6d.

1391.—By 15 Rich. II. c. 4, it was sought to make the measure of grain uniform throughout the Kingdom, thus:

Item. Whereas it is ordained by divers statutes, that one measure of Corn, Wine, and Ale should be throughout the Realm, and that 8 bushels stricken make the qr. of Corn; nevertheless, because that no pain [penalty] is thereupon ordained in the said Stat., divers people of divers Cities, Boroughs, Towns, and Markets, will not take, neither buy in the said Cities, etc., ne in none other place, but 9 bus. to the qr.; and if they cannot buy in that manner, they arrest it as forfeit, to the great Damage and oppression of all the people, and manifestly against the Stat.

It is therefore enacted that the said Stat. should be "firmly kept and holden," as well in Lond. as every other place in the Realm; and as well by Water as Land, notwithstanding any usage to the contrary. Penalty for forfeiture of grain so bought. (See 1670.)

1393.—By 17 Rich. II. c. 7, it is enacted as follows :

Item. The King, at the request of the Commons to him made in this present Parl., hath granted License to all his liege People of his Realm of England, to ship and carry Corn out of the said Realm, to what parts that please them, except to his enemies, paying the Subsidies and Duties thereof due; notwithstanding any Ordin., Proclamation, or any Defence made before this time to the contrary; Nevertheless he will that his Council may restrain the said Passage when they should think best for the Profit of the Realm.

This Stat. was confirmed by 4 Hen. VI. c. 5 (1425-6).

1400.—2 Henry IV. It will be useful to give at certain stated periods as we proceed, short schedules of the prices of the leading articles of food, and in contrast therewith the price of labour at the same date. We commence at this date; but it must be remembered that the prices varied greatly in different localities, in consequence of the difficulty of transport.

FOOD, ETC.	s. d.	LABOUR.	s. d.
Wheat, per quarter	8 0	A labourer's wages, per day	0 3
Barley, ditto	5 4	Reaping grain, per acre	0 9
Fat sheep	1 0	Threshing grain, per qr.	0 2½
Ditto	0 10½	A master mason's wages p. day	0 4
An Ox carcass	7 6	Making 100 fagots	0 7
A Goose	0 4	Sawing, per 100 ft. of deal	1 1
A Lamb	0 8	A dung cart	1 2
Best beer per gallon	0 1½		
Claret, ditto	0 8		

1417.—4 Henry V. On the 4th Feb. it was Ordered that in time of Lent *Simmel* loaves [*i.e.* loaves of the finest wheaten flour] should not be made, nor yet any other white loaves, that are called *painman*, *maincherin*, etc.; but only three kinds, namely *tourte*, his [brown bread known also as *tréte*] and *white*.

1436.—By 15 Hen. VI. c. 2, it was enacted as follows :

Item. Forasmuch as by the Law it was ordained that no man might carry nor bring Corn out of the Realm of England without the King's License, for cause whereof Farmers and other men who use Manurement of their Land, may not sell their Corn but of a low price, to the great damage of all the Realm: Our said Sovereign Lord the King, willing in this case to provide Remedy, hath ordained by authority aforesaid, That it shall be lawful to every person to carry and bring Corn out of England, and the same to sell to whatsoever person that he will, except all only to the King's Enemies, as often and as long as a quarter of Wheat or Barley is so shipped; and that without suing any License for the same: All other Stat. before this time thereof made to the contrary notwithstanding. Provided always that the King be contented of his Customs and Money. And this Ordin. shall endure till the next Parl.

This Act was confirmed by 20th of same reign (1441), and made perpetual by 23 Hen. VI. c. 5 (1444). (See 1463.)

1450.—29 Henry VI. The prices of food and labour as given by Doubleday—*The True Law of Pop.* (1841)—at this date were as follow :

FOOD, ETC.	s. d.	LABOUR.	s. d.
Wheat (plentiful) per qr.	5 4	A Weeder per day	0 2
Finest do. „	8 0	A Reaper, with diet	0 3
Oats	2 1	A Mower, do.	0 4
A lean Ox	13 0	A Labourer, per 3 days	1 4
A Veal or Calf	2 0	A Sawyer	0 6
A Lamb	1 0	A Tiler	0 6
A Goose	0 3	A Tiler and Man	1 2
Eggs per 100	0 5	A Master Carpenter	0 10
Red wine per gallon	1 0	A Man and Cart	1 8

1454.—The following are authenticated prices for this year: Malt (plenty) per qr., 2s. 8d.; ditto, 1s. 4d.; an ox, 12s.; ale, per gallon, 1d.

1463.—The first prohibition by Parl. against the importation of Corn into Gt. Brit. of which we find any record occurred this year [we have seen 1361 stated]. By 3 Edw. IV. c. 2, it is enacted :

Whereas the Labourers and Occupiers of Husbandry within this Realm be daily grievously endangered by bringing in of Corn out of other Lands and Parts into this Realm, when corn of the growing of this Realm is at a low price: Our said Sovereign Lord the King considering the premises, by the advice, assent, and authority aforesaid, hath ordained and estab. That no person from the feast of St. John the Baptist next coming shall bring or convey into any Place or Port of this Realm, by way of merchandise nor otherwise, any Wheat, Rye, or Barley, which is not of the growing of this Land, or of any Isle pertaining to the same, or of the growing of *Ireland* or *Wales*, at any time that the quarter of wheat doth not exceed the price of 6s. 8d., the qr. of Rye 4s., and the qr. of Barley 3s. of lawful money of England, within the place or port where such Wheat, Rye or Barley shall happen to be brought; upon pain of forfeiture of the said Wheat, Rye, and Barley, the one half to our said Sovereign Lord the King, and the other half to him which shall happen to seize any such Wheat, Rye or Barley: Provided always that this act extend not to any Wheat, Rye or Barley taken by any of the King's liege people upon the Sea without Fraud or Covin.

1468.—Edward IV. Robert Brook and Thomas West, Esqrs., were at this date Clerks of the Market, and in a MS. book of theirs there is recorded the following :—

Memorandum. The Baker shal be allowed in every Quarter of Whete bakyng, as it is provyd by the Kyngis Bakers, as it shal appere hereafter.

First, he shal have 4d. and all his Branne to avauntage; and two Lofs for Fornage; and three halfpence for three Servautes; and for Coles 6d. and for yeste 6d. and for Salt 6d., and for wood 3d.,

and for bultelle [bolting the meal] *od.*, and for the Sealing *od.*, and for candeles, *q.* Summ *11d.* *q.* beside his Branne, and the two Loves.

This is proved by the Statute: And also by an acte in William Conquerours tyme: and the tyme of Henry the III.; and in the tyme of King Edward the III.: and never reversid sithen.

Memorandum, It is ordayned bi Statute, that alle manner of Bakers dwelling out of Cities and Burgh Townes, as Bakers dwelling in Villagis and upon *Londe*, their *Peny Lof*, what corne so ever it be, be it white Brede or browne, it shall wey more than the *Peny Lof* in the Town or City by *x s.* and the Halfpeny Lof by *v s.* because they bere not suche chargis as Bakers in the Cities doon, and Townes. And yet they shal kepe the Assize truly according unto the Statute upon payne of *6s. 8d.* for his offence, as often as he doth the contrary, beside his Mersement for brekyng of the Size, if his Lof wey nat as they do in Cities and Burgh Townes. And in likewise shal the Ferthing Lof wey after the Statute.

Then follows the "Assize of Brede" as follows:—

This is the Assize of al maner of Brede of Whete, and of what eting Corne soever it be. It shal be weied after the Ferthing Wastell; for the Symonell shal weye less than the Wastell than *2s.* because of the setting.

The Ferthing White Lofe, called the *Cocket*, shal wey more than the wastell by *2s.*, because of the bakynge.

The Halfpeny Wheten Lofe, that is to say, the halfpeny *Cribel* Lofe, shal wey three ferthing White Lofys.

The Lofe of al maner of Corn, that is to say the *Horse Lof*, shal wey two halfpeny White Lofys.

In this same book there was also contained the Assize for other branches of trade connected with Food of the people: thus for the "Myller," the "Brewer," the "Bocher," the "Fyssher," etc.

1480.—During this year wheat was *4s. 4d.* p. qr.; oats *2s.*

1496.—12 Hen. VII. There was pub.: *The Assize of Bread, printed on vellum, with woodcuts, set forth and printed at the request of Mich. English and Jo. Rudestons, Aldermen.*

1500.—16 Hen. VII. The prices of food and labour this year are recorded as follows:

FOOD.		s.	d.	LABOUR.		s.	d.
Wheat p. qr.	.....	7	4	A Woman Labourer p. day	.....	0	2½
Malt "	.....	2	8	A Carter p. day	.....	0	3
A Cow	.....	8	0	A Reaper "	.....	0	3
A Lamb	.....	1	0	A Mower "	.....	0	4
A Pig	.....	0	5	A Carpenter with diet p. day	.....	0	6
Carcass of a Neat	.....	0	10	A Plumber " "	.....	0	6
Eggs p. 100	.....	0	9	A Tiler or Joiner " "	.....	0	6
Wine p. gallon	.....	1	0	Lesser crafts without diet p. day	.....	0	6
" "	.....	0	8				

1542.—There was pub.: *Assize of Bread and Ale, after the pryse of a quarter of Wheal, with the weight of butter and cheese, and the measure of all manner of Wood and Cole, and Lath, Bourde, and Tymbre.* 4to. printed by R. Wyer. There was, we believe, an earlier ed. without date, and many later ed., the last being pub. in 1700 by H. Jackson.

1550.—3 Edw. VI. Prices were as follows:

FOOD.		£	s.	d.	LABOUR.		s.	d.
Wheat p. qr.	.....	0	14	8	A Binder and Shearer with diet	.....	
Wheat (scarcity) p. qr.	.....	1	0	0	p. day	.....	0	2
Barley " "	.....	0	5	0	A Mower's statute wages with diet	.....	
A Steer, fat	.....	1	5	0	p. day	.....	0	4
Mutton p. carcass	.....	0	5	8	A Mower without diet	.....	0	10
A Wedder	.....	0	4	4	A Shearer " "	.....	0	5
					A Journeyman Tailor with diet	.....	0	4

1552.—By 5 & 6 Edw. VI. c. 14—*An Acte againste Regrators, Forestallers, and Engrossers*—these are severally defined to be—1. Forestallers, persons buying Goods or Victuals on their way to a Market or Port; or contracting to buy the same before actually brought for sale; or endeavouring to enhance the price or prevent the supply. 2. Regrators, persons buying Corn, Victuals, etc., and reselling them in the same Market Place, or within 4 miles thereof. 3. Ingrossers, persons buying Growing Corn, or buying Victuals to sell again. But under sec. 10 persons might "engross" Corn, "not forestalling" it, if at or under certain prices p. qr., viz. Wheat *6s. 8d.*, Barley and Malt *3s. 4d.*, Oats *2s.*, Pease and Beans *4s.*, Rye, etc., *3s.* By sec. 12, inhabitants within 1 mile of the sea might buy fish fresh and salt to resell. Sec. 13, drovers might buy cattle, to resell them in markets 40 miles distant; being ann. licensed by Justices of the Peace.

1554.—By 1 & 2 Philip & Mary, c. 5—*An Act to restrain carrying of Corn, Victuals, and Wood over the Seas*—it is recited:

Whereas sundry good Estatutes and Laws have been made within this Realm, in the time of the Queen's Highness most noble Progenitors, That none should transport, carry or convey out of this Realm into any Place in the Parts beyond the seas any Corn, Butter, Cheese or other Victual (except only for the victualling of the Towns of *Calice, Hames, and Guisnes*, and the Marches of the same) upon divers great Pains and Forfeitures in the same contained. That notwithstanding, many and woody covetous and unsatiable persons, seeking their own lucre and gains, have, and daily do carry and convey, innumerable quantity, as well of Corn, Cheese, Butter and other Victual, as of Wood out of this Realm into the parts beyond the seas, by reason whereof the said Corn, Victual and Wood are grown into a wonderful dearth and extreme prices, to the great detriment of the Common Wealth of this your Highness Realm, and your faithful subjects of the same.

In future no such exports to be made without license, except when prices should not exceed the following: Wheat, 6s. 8d. p. qr.; Rye, 4s.; Barley, 3s.; then it should "be lawful to every person and persons to carry and transport over the sea to any place beyond the seas at their pleasure, any of the said kinds of corn, so that it be not to the King and Queen's enemies."

1555.—By 2 & 3 Philip & Mary, c. 15—*An Act that Purueiours shall not take victuals within five miles of Cambridge and Oxford*—the preamble of which is as follows:

Humbly sue to your Maesties, the Societies, Colledges, and Companies of your true and faithfull subjects, and daily oratours, the Scholers, and Students of both your Maesties Vniuersities, Cambridge and Oxford, that where it hath bene accustomed time out of mind, that both the said market townes of *Cambridge and Oxford*, wherein the said two Vniuersities be set, and the circuit of five miles next adjoyning, hath bene free from any charge or molestation of any common takers, or Purueiours for Victuall, whereby the said markets were more plentifully serued with victuall, and the poore estate of a great multitude of Scholers, hauing very bare and small sustentation, thereby relieved, and now by the means that contrary to the same laudable custome, diuers purueiours and takers haue of late excessively frequented the same market, and thereby giuen occasion to make victuals more skant, and much dearer, to a notorious decay of Scholers, which also daily in this great dearth is like to increase, and be more lamentable, to the hindrance of God's seruite, the dishonour of the Realme, and discomfort of all good and holy men louing learning and uertue.

II. It may therefore please your Maesties, of your great pitie, and abundant fauour and loue towards your said two Vniuersities, being the very two onely nurses of good learning in the Realme, with the assent of the Lords spirituall and temporall, etc., etc.

And it is then enacted "that from hencefoorth, no manner of Purueiour, Taker, Lodger or other Minister, may, or shall take or bargain for any kinde of victuall or graine, in any of the said markets or townes of *Cambridge*, and the Citie of *Oxford*, nor shall take or bargain for any victuall within the compasse of five miles thereto adjoyning, without the consent, agreement, or good will of the owner or owners, neither shall attempt to carrie, take awaie, or bargain for any manner of graine, or other victuall brought or provided within the said space of five miles, by any common Minister of any Colledge, Hostell, or Hall, to bee spent within any of the said Colledges, Hostels or Hals, vpon paine of the forfeiture of the quadruple value of any such maner graine or victuall so taken or bargained for;" and for any such offence should suffer imprisonment "for the space of three moneths, without baile or maineprie." The finding might be by jury empanelled by the "Chancellour, Vicechancellour, or his Commissarie for the time being," with two "Iustices of the Peace of the Countie wherein the Vniuersities be set."

III. Provided, that this Act shall not be put in execution at any time or times, whensoeuer your Maesties, or the heires or successors of your Maestie our Soueraigne Ladie, shall please to come to any or both the said Vniuersities, or within seven miles of either of them, but shall be in suspence during that time onely and no longer.

Nothing in the said Act was to be in any wise "preiudiciall or hurtfull to the Maior, Bayliffes and communalitie" of the said Cities and Borough.

1558.—By 1 Eliz. c. 11—*An Acte limiting the tymes for layeng on Lande Marchandise from beyonde the Seas, and touching Customes for Sweete Wynes*—sec. 10, it is provided that Corn may be exported from usual Ports in *Norfolk and Suffolk* at the prices in Stat. 5 & 6 Edw. VI. c. 14 (1552).

1562.—By 5 Eliz. c. 5—*An Acte touching certayne Politique Constitutions made for the maintenance of the Navye*—sec. 17, it is enacted that Corn might be exported by British subjects in English ships at certain ports, when not exceeding the following prices, viz., Wheat 10s., Rye, Pease and Beans, 8s., and Barley or Malt 6s. 8d. p. qr.

1570.—13 Eliz. This was a year of scarcity, and wheat was 16s. per qr. Labourers' wages, without diet, were 5d. per day.

1571.—By 13 Eliz. c. 13—*An Acte for the Encrease of Tyllage*, etc.—it is enacted that Corn might be exported to Friendly Countries by Brit. subjects, from certain ports, in certain ships, at all times when Proclamation was not made to the contrary, on the price of Corn being ascertained yearly in the several countries. A Duty of 12d. p. qr. imposed on all Corn exported. The Queen might prohibit the exportation of Corn by Proclamation at all times.

1572.—Sir Lionel Duckett, Mayor. This year there was "Imprinted on a Sheet, by J. Day, the City Printer," a tariff of the prices of poultry, with a preface as follows:

Forasmuch as through the greedie couetousnesse of the Poulters, the Prices of all Poultrie Wares within the Citie and the Liberties thereof are grown to be excessive and unreasonable, not only to the perillous example of all manner of people throughout the whole Realme that do sell Poultrie Wares, but also to the great charges of all Noblemen, Men of Worship, and Gentlemen, that do keepe any Houses within this Citie, or neere the same:

For Reformation whereof, it is Ordered by my Lord Maior and Court of Aldermen, that all maner of Persons, as well Poulterers as others, that shall after this present 5th day of April, in the xiiij year of the Queenes Maesties Reign, sell any Poultry Wares within this Citie and the Liberties thereof, shall observe and keep these prices following.

Then follows detailed list of prices to be charged in "shops" and in the "markets."

1575.—17 Eliz. The price of wheat per qr. was £1.

1585.—Scarcity. Wheat, £1 4s. per qr. Barley, 15s. Calf, 7s. 4d.

1586.—In view of preventing a dearth in the City of London, certain of the City cos. "were, by the Lord Maior's means, to buy each of them a quantity of corn, and to lay it up in a garner in the Bridge-House."—*Stow*.

1593.—By 35 Eliz. c. 7—*An Acte for continuing of diuerse Statutes*—it is enacted

by sec. 17 that the export of Corn may be prohibited either generally throughout the whole Realme, or in any of the counties individually, having sea-ports.

1594.—“And such a dear year was that of 1594, Sir John Spencer, Maior, who therefore (it being now winter time) called upon the cos., viz. those of them that had not laid in their proportion, to do it within so many days; corn being then brought in from foreign parts.”—*Stow*.

During the siege of Paris by Henry IV. this year, owing to famine, bread which had been sold, while any remained, for a crown a pound, was at last made from the bones of the charnel-house of the Holy Innocents.—*Hinault*.

1595.—Reign of Elizabeth. There was pub. by John Powel, sometime clerk of the market: *The Boke of the Assyse of Breade, etc.*, “corrected and enlarged.” There were many other editions of this work, but we propose here to quote from the ed. of this date, which we believe contains text as confirmed by the Lords of the Privy Council (“Christoph. Hatton, Canc.”) about this period as follows:

Ancient Laws, Customs, and Good Ordinances, set down for Bakers, in making, sizing, and selling all sorts of Lawful Bread, which by the Laws are vendible unto the Queen's Subjects in the Commonwealth retailing the same.

First, That no manner of person or persons shall keep a common Bakehouse in Cities and Corporate Towns, but such persons as have been apprenticed into the same Mystery and brought up therein for the space of 7 years, or else otherwise skilful in the good making and true sizing of all sorts of Bread; and shall put his own mark or seal upon all sorts of his man's Bread, which he or they shall make or sell as before is mentioned.

Item, That no Baker or any other persons do make, bake, utter and sell any kinds or sorts of bread in the Commonwealth, but such which the stat. and antient Ordin. of this Realm do allow him to bake and sell: that is to say, they shall bake and sell *Symnel* bread, and *Wastel*, *White*, *Wheaten*, *Household*, and *Horse* Bread; and none other kinds of Bread to put to sale into her Majesty's subjects.

Item, They must make and bake *Farthing White Bread*, *Halfpenny White*, *Penny White*, *Halfpenny Wheaten*, *Penny Wheaten Bread*, *Penny Household*, and *Twopenny Household Loaves*: and none of greater Size, upon pain of forfeiture unto poor people all such Great Bread, which they or any of them shall make, to sell of greater size (the Time of Christmas always excepted).

Item, They shall not utter and sell to any Innholder, or Victualler, either in Man's bread or Horse bread, (which shall retail the same) but only 13d. worth for 12d., without any poundage or other advantage.

Item, They shall sell and deliver unto Innholders and Victuallers in Horse bread but 3 loaves for a penny, and 13 pennyworth for 12d. (as aforesaid), every one of the same three Horse loaves weighing the full weight of a penny white loaf, whether wheat be good, cheap, or dear.

Item, That no Baker, or other person or persons shall at any time or times hereafter make, utter or sell by Retail, within or without their Houses, unto any the Queen's subjects, any Spice Cakes, Buns, Bisket, or other Spice Bread (being Bread out of Size, and not by Law allowed) except it be at Burials, or upon the Friday before *Easter*, or at *Christmas*; upon pain of forfeiture of all such Spice Bread to the Poor.

Item, Whereas there are in Cities and Corp. Towns, Common Bakers using the mystery of baking there, and within the same Towns Common Bakers which come into the market with their Bread to be sold, they shall not only bring with them such kinds or sorts of sized Bread as the Law and Ordin. do allow to be made and sold, as aforesaid, but also shall keep and observe this order in the weight of their Bread, as hereafter followeth. Because the said Foreigners do not bear and pay within the same Cities and Towns, such Scot and Lot as the Bakers of the same Towns do.

First, The Foreigners Halfpenny White Loaves shall weigh half an ounce more in every loaf than the Bakers of the same Towns halfpenny white loaves do.

Item, Their penny White Loaves shall weigh one ounce more to every loaf than the Bakers of the same Towns penny white loaf do.

Item, Their halfpenny wheaten loaves shall weigh one ounce in every loaf more than, etc.

Item, Their penny wheaten loaves shall weigh two ounces more than, etc.

Item, Their penny Household loaves, etc.

Item, Their twopenny Household loaves shall weigh four ounces more than, etc.

Provided always, that the Clerk of the Market of H. M.'s Household, his Deputy or Deputies, Maiors, Bailiffs and other officers of Cities, Corp. Towns and Liberties, shall look into, have diligent care and Respect unto the due Performance and Execution of these articles, and they shall and may from time to time freely give and distribute all such unlawful bread as shall be hereafter made, and put to Sale, being contrary to these Art. before mentioned, unto poor Prisoners or any other poor People. Willing and requiring all Justices of Peace, Constables, Bailiffs, and other Officers to be aiding, assisting, and helping all the aforesaid Officers in the due Execution thereof, as they will answer to the contrary at their perils.

1598.—There was pub. John Stow's *Survey of the Cities of Lond. and Westminster*, and in Book V. will be found chap. 25, with the following heading: “Antient Assize and weight of bread: an Ordinance for it, according to the price of wheat. Old Orders for Bakers. How the Assize of Bread was made each year. The Bakers Halimotes [? Hallmotes]. Assay of Bread according to the Regale of England. Laws and Charges for Bakers. Miller, Baker, Brewer, Butcher, Fisher, Cook, Inholder, Taverner, Tallow-chandler, Spicer, Weaver, Tanner, Cordwayner, Carrier, White Tawyer, Mercer, etc. Forestallers. All their Assizes. Standard for Weights adjusted. Measure for Seacoal and other things measurable upon the Thames.” Wherein will be found much that is of interest on the questions treated of in this art. We have here quoted from the ed. of 1710, which had passed through many hands after its orig. author.

1600.—42 Eliz. The recorded prices at this date were as follows:

FOOD.	£ s. d.	LABOUR.	s. d.
Wheat, p. qr.	1 1 0	A Labourer p. day	0 10
Barley, ditto	13 0		
A Sheep	6 4		
A Goose	1 0		
Six Pigeons	0 6		

be improved to considerable Profit and Advantage (if sufficient Encouragement were given for the laying out Cost and Labour on the same), and thereby much more Corn produced, great numbers of people, horses and cattle employed, and other lands also rendered more valuable.

And it is then enacted that when the price of Wheat did not exceed at the place from which it was to be exported 48s. per qr. Winchester measure, Barley or Malt 28s., Buckwheat 28s., Oats 13s. 4d., Rye 32s., Peas or Beans 32s. of English money, then the same might be exported to places beyond the seas. And when the prices did not exceed those named at the place of import, there might be imported Wheat upon paying a Customs duty of 5s. 4d., Rye 4s., Barley or Malt 2s. 8d., Buckwheat 2s., Oats 1s. 4d., and Peas or Beans 4s.

And it was further enacted, That when the prices of Corn or Grain, Winchester measure, did not exceed the rates above stated at the Markets, Havens, or places where the same should be bought, that then it should "be lawful for all and every person and persons (not forestalling nor selling the same in the same market within 3 months after the buying thereof) to buy in open market, and to lay up and keep in his or their Granaries or Houses, and to sell again, such Corn or Grain of the kinds aforesaid as without Fraud or Covin shall have been bought at or under the price before expressed, without incurring any penalty; any Law, Statute or Usage to the contrary notwithstanding."

Sec. 18 of this Act is as follows:

Provided also and be it enacted that it shall and may be lawful to import Cattle of the breed of the *Isle of Man* not exceeding 600 in any one year. And Corne of the growth of that Island out of that Island into England, soe as the said Cattle be landed at Chester, Liverpoole, or Wirewater, Anything in this Act to the contrary thereof in any wise notwithstanding.

Adam Smith observed of this measure, that with all its imperfections, it had done more to promote plenty than any other law in the stat. book.

1669.—The Court of Aldermen of the City of Lond. ordered an Assize of Bread to be held.

1670.—By 22 Charles II. c. 8—*An Act for ascertaining the Measures of Corne and Salt*—it is recited that there was a great variety of measures existing in the "several Countyes, Cityes, Burroughes, Ports, and other places of this Realme for the measuring, buying, and selling of all sorts of Graine, Salt and other Commodities usually bought and sold by the Bushell, to the great defrauding and oppressing of the people, contrary to the Great Charter," etc. It is therefore enacted that the "Winchester Measure" only be used, under a penalty of 40s. And to the end that there might be "a just and certaine measure," so as to determine all controversies, there was to be affixed before the 29th of Sept. this year within the Cities, Borough and Market towns "one Measure of Brasse provided and chained in the public market place upon paine of forfeit and loose for every person soe neglecting respectively the summe of £5." Constables to search for other measures and to break them. (See 1391.)

Same year, by 22 Car. II. c. 13—*An Act for Improvement of Tillage and the Breed of Cattle*—it was enacted that it should be lawful after the 24 June of this year for all and every person or persons, native or foreigner, at any time or times, to ship, lade, carry, and transport as merchandize all sorts of corn and grain, "although the prices thereof shall exceed the rates set down" in the Act of 1663, paying for the same the rates stated in the Subsidy of 1660. But when the rates did not exceed those following, then there should be paid the custom and poundage following, viz. for Wheat when the same shall not exceed the price of 53s. 4d. p. qr., 16s.; and when the price of Wheat exceeded the price last named, but did not exceed 80s., the sum of 8s.; for every qr. of Rye when the price did not exceed 40s., 16s.; for Barley or Malt when it did not exceed 32s., 16s.; for Buckwheat the same; for Oats not exceeding 16s. p. qr., 5s. 4d.; for Peas and Beans not exceeding 40s. p. qr., 16s.; each qr. to contain 8 bush., and each bush. 8 gallons and no more.

1685.—By 1 James II. c. 19—*An Additional Act for the Improvement of Tillage*—the Act of 22 Car. II. "of ever blessed memory," c. 13 (1670), is recited, but inasmuch as no provision was made by the said Act for ascertaining and determining the prices therein set forth, "by reason whereof several great quantities of Foreign Corn and Grain have been imported without paying the respective Duties by the said Act appointed, contrary to the true intent and meaning of the said Act," it was now determined that Justices of the Peace upon the coast have power, "upon the oaths of two or more honest and substantial persons of the respective Counties, being neither Merchants nor Factors for the importing of Corn, nor anyways concerned nor interested in the Corn so imported, and each of them having a freehold estate of £20 p.a. or a leasehold estate of £50 p.a. above all charges and reprints, and being skilful in the price of corn," etc., to determine the prices for the purposes of the said recited Act.

1688.—By 1 Wm. & Mary, stat. 1, c. 12—*An Act for the encouraging the Exportation of Corn*—it is recited: "Forasmuch as it hath been found by experience, that the exportation of Corn and Grain into Foreign Parts, when the Price thereof is at a low rate in this kingdom, hath been a great advantage, not only to the owners of Land, but to the Trade of this Kingdom in general." Be it therefore enacted, etc., and it was enacted that when Malt or Barley "Winchester measure" should be at or under 24s. p. qr., Rye at or under 32s., and Wheat at or under 48s. p. qr., the Master and Crews

of Brit. Ships exporting the same should receive a *Bounty* on a scale set forth in the said Act. Precautions taken not to allow such grain to be reshipped into Gt. Brit.

By another Act of this year, 1 Wm. & Mary, c. 34—*An Act for Prohibiting all Trade and Commerce with France*—which recites that “forasmuch as Your Majesties, upon just and honourable grounds, have been pleased to declare an actual war with France,” the importation of French Wines, etc., was prohibited: all Vintners and Retailers of Wine were to sell Wine “by and in measures made of pewter, and sealed according to the Stat.” Finally:

XX.—And for the preventing of the mischiefs which may be occasioned by sophisticating, corrupting, and adulterating of Wines during such time as they are by this Act allowed to be sold, be it enacted, that if any Merchant, Vintner, Wine-Cooper, or other person selling Wine by Wholesale or Retail shall corrupt, sophisticate, or adulterate any Wine, or shall utter or sell any Wine corrupted, sophisticated, or adulterated; such person shall forfeit the sum of £300 for every such offence, the one moiety thereof to their Majesties and their successors, and the other moiety [to the informers].

This Act—which we believe was the first directed against adulterations of this class—was perpetuated by other Stat.

1698.—By 10 Wm. III. c. 3—*An Act to prohibit the Exportation of any Corn, Malt, Meale, Flour, Bread, Biscuit, or Starch for one year from the 10 Feb. 1698*—it is recited that the price of Corn in the Kingdom of England, Dominion of Wales, and Town of Berwick-upon-Tweed was at this time excessive; and that in several other parts of Europe it was “scarcer and dearer than in England;” hence no Corn, etc., was to be exported except under the provisions of this Act. The Commissioners of Customs might seize all vessels unduly laden with Corn for exportation, even to Scotland, and take the same to the King’s warehouse. But Corn might be exported for sustenance of crews and passengers of ships, and for British Ports and Colonies, and for the benefit of English Fisheries, and Malt to the Channel Islands, also carried coastwise, and on navigable rivers. And on decrease of price the King might by Proclamation permit exportation before expiry of this Act.

1698-9.—By 11 Wm. III. c. 1—*An Act for taking away the Bounty Money for exporting Corn from the 9 Feb. 1699 to the 29 Sept. 1700*—the purposes for which the said Bounties had been instituted are recited, and then: “But forasmuch as it appears that the present stock and quantity of Corn in this Kingdom may not be sufficient for the use and service of the people at home, should there be too great an exportation into parts beyond the seas, which many persons may be prompted to doe for their own private Advantage and the Lucre of the said Bounty or Allowance-money,” it was suspended accordingly for 1 year.

1700.—By 11 & 12 Wm. III. c. 20—*An Act for taking away the Duties upon the Woollen Manufactures, Corn, Grain, Bread, Biscuit and Meal Exported*—it was enacted:

IV.—And for the greater encouragement of Tillage, Be it further enacted by the authority aforesaid, That from and after the 30 day of March, 1700, the subsidy and all other duties whatsoever payable for or upon the exportation of Wheat, Rye, Barley, Malt, Beans, Peas, and other sorts of Corn and Grain whatsoever ground or unground, and for and upon the Exportation of Bread, Biscuit, and Meal, or any of them, out of or from the Kingdom of England, Dominion of Wales, or Town of Berwick-upon-Tweed, as to so much of the said Commodities, or any of them, as shall be so exported after the said 30 day of March, shall cease, determine and be no longer due or payable to H. M., his heirs and successors: any Law, Stat., Usage, or Prescription to the contrary notwithstanding.

By 12 & 13 Wm. III. c. 10—*An Act of Supply*—there is provision made as to the payment of the bounties under the Act of 1688.

1703.—By the 9th Act of the Parl. of Scotland, holden by Queen Anne this year, intitled—*An Act discharging Importation of Irish Victual, Beef and Cattle*—the importation of victual from Ireland or any other places beyond the seas into Scotland was restrained and prohibited, under several penalties contained in the said Act, and in other Acts of the Parl. of Scotland therein referred to. But with this proviso, that when, by reason of Dearth, the prices of Victual should exceed the rates specified in the said Act, the Lords of H. M.’s Privy Council of Scot. should have power, after due trial by them taken of the prices of Victual, to suspend and discharge the execution of the said prohibitory Acts for such space of time as the exigencies of the said Dearth should require.

1707.—In the Treaty of Union between England and Scotland, made this year, it was provided by Art. VI., That the prohibition as then in force by the Law of Scotland against the Importation of Victual from Ireland, or any other place beyond the Seas, into Scotland, should after the Union remain in the same force as it then was, until more proper and effectual ways should be provided by the Parl. of Gt. Brit. for discouraging the importation of the said Victual from beyond the Sea. (See 1741.)

Dr. Fleetwood, Bishop of Ely, pub. *Chronicum Preciosum: An Account of Money, Price of Corn, Wages, etc., in Eng. for 600 Years last past.* 2nd ed. 1745. McCulloch said this work contained the best account of prices pub. in Eng. previously to that given by Sir F. M. Eden—*Lit. of Pol. Economy*. There was for many years pub. a Broadside, *An Account of the True Market Price of Wheat and Malt at Windsor for 100 Years*, by Wm. Fleetwood, Bp. of Ely.

1709.—By 8 Anne, c. 2—*An Act to prohibit the Exportation of Corn, Malt, Meal, Flour, Bread, Biscuit, and Starch, and Low Wines, Spirits, Worts, and Wash drawn from Malted Corn*—it is recited:

Whereas the price of Corn at this time within the Kingdom of Gt. Brit. is become very great and (in

some parts thereof) excessive, which tends to the Impoverishment of many of H.M.'s good subjects, especially of poor manufacturers and others of a meaner condition, and by reason that Corn is several other parts of *Europe* is scarcer and dearer than in Gt. Brit., it is likely that several persons for their private Advantage or Lucre will not only export or convey great quantities of Corn from this Kingdom, but likewise distil excessive quantities of Low Wines and Spirits from Malt, Corn and Grain, in order to export the same to Foreign parts, whereby the price of Corn will be further enhanced, to the Detriment of H.M.'s good subjects, and the destruction of many of them, if a timely remedy is in this behalf be not provided. Be it therefore, etc.

It was then enacted that from 29 Sept. 1710, no exportation of the articles named be made other than as therein provided. Export might be permitted by Proclamation. No limit of price named.

By another Act of the same year, viz. 8 Anne, c. 18—*An Act to regulate the Price and Assize of Bread*—it is recited :

Whereas by the Stat. made in the one-and-fiftieth year of the Reign of King Henry the Third [intituled *Assisa Panis et Cervisie*], Provision was made, amongst other things, for settling the Assize of Bread ; but the said Stat. is expressed in terms so obscure and impracticable in these times that many doubts and difficulties have arisen, and daily do arise, in the construction thereof, whereby little or no Observance hath in many places been made, either of the due assize, or reasonable price of bread ; and covetous and evil-disposed persons, taking advantage of the same, have, for their own gain and lucre, deceived and oppressed H.M.'s subjects, and more especially the poorer sort of people ; for remedy whereof for the future, and that a plain and constant Rule and Method may henceforward be duly observed and kept, in the making and assizing of the several sorts of bread made for sale,—Be it enacted, etc.

So much of the said Statute as relates to the assize of bread is then repealed, and it was enacted that after May 1, 1710, the Lord Mayor and Aldermen of Lond., and the Mayor and Bailiffs, Aldermen or other chief magistrates of other cities and towns, and the Justices of the Peace in places where there was no mayor, etc., should set the assize and weight of all sorts of bread, having respect to the price of grain, etc., no person to sell bread other than such as should be licensed by the Lord Mayor, and other authorities named. Bread to be made according to a scale in the Act, regulating weight according to quality of the flour and the price of corn. All bread to be marked. Bakehouses might be searched, etc.

This Act was amended and continued by various Acts at different periods, as will be shown in what follows.

1714.—There was enacted 1 Geo. I. (stat. 2) c. 26—*An Act for continuing several Laxes therein mentioned, relating to Coals, Hemp and Flax, Irish and Scotch Linen, and the Assize of Bread ; and for giving power to adjourn the Quarter Sessions for the County of Anglesa, for the purposes therein mentioned.* After 1 Sept. 1715, Bakers making bread deficient in weight should for every ounce forfeit 5s., for lesser deficiencies 2s. 6d.

There was this year pub. a pamph. : *Assize of Bread, and other Weights and Measures to be observed by all Bakers, Brewers, Innholders, Victuallers, Butchers, etc., according to the Rise and Fall of Markets, with the Clerk of the Markets Office for Reformation of False Weights, etc.* 4to.

1718.—By 5 Geo. I. c. 25—*An Act for continuing the Act made in the 8th year of the late Queen Anne, to regulate the Price and Assize of Bread ; and for continuing the Act made in the 12th year of H. late M.'s reign, for the better Encouragement of the Making of Sail Cloth in Gt. Brit.*—the Act of Anne, as amended, continued for 5 years.

1723.—By 10 Geo. I. c. 17—*An Act for continuing Acts for Preventing Theft and Rapine upon the Northern Borders of England ; and for better regulation of Pilots ; and for regulating the Price and Assize of Bread ; and for better Encouraging of the Making of Sail-Cloth in Gt. Brit.*—the Act of Anne, as amended, was extended for 7 years.

1729.—There was enacted 2 Geo. II. c. 18—*An Act to ascertain the Custom payable for Corn and Grain Imported ; for better ascertaining the price and quantity of Corn and Grain, for which a Bounty is payable on Exportation, etc., etc.* Powers were given to Justices at Quarter Sessions to determine the price of Grain.

1732.—The 5 Geo. II. c. 12, amended the Act of 1685 regarding the mode of "determining the common market price of middling English Corn and Grain," which "had been found ineffectual ;" and the matter was now to be determined by the oath of the Grand Jury assembled at Quarter Sessions, on a presentment made in open Court. This mode was not to extend to London.

1738.—By 11 Geo. II. c. 22—*An Act for punishing such persons as shall do Injuries and Violences to the Persons or Properties of H. M.'s subjects, with Intent to hinder the Exportation of Corn*—it is recited :

Whereas many disorderly and evil-minded persons have of late frequently assembled themselves in great numbers, committed great violences, and done many injuries to the persons and properties of H.M.'s subjects, with intent to hinder the Exportation of Corn, whereby many of H.M.'s subjects have been deterred from buying of Corn and Grain, and following their lawful business therein, to their great loss and damage, as well as the great damage and prejudice of the Farmers and Land-owners of this Kingdom, and of the nation in general.

It was then enacted that, "for the better preventing such wicked and disorderly practices," persons using violence to hinder the purchase and carriage of corn, should on conviction be imprisoned and publicly whipped. The "Hundred" was made liable to the extent of £100 for corn destroyed.

There was also pub. this year : *Concise Obs. on the Nature of our Common Food, so far as it tends to Promote or Injure Health.* By a Gentleman of the Faculty.

1741.—There was enacted 14 Geo. II. c. 7—*An Act for licensing the Importation of Victual from Ireland and other Parts beyond the Seas into Scotland, in time of Dearth and Scarcity.* (See 1703 and 1707.)

1749.—By 22 Geo. II. c. 46—*An Act [inter alia] for regulating the Price and Assize of Bread*—the Act of Anne, as amended, was continued to 14 June, 1757.

1751.—By 24 Geo. II. c. 56—*An Act for ascertaining the Admeasurement of Wheat Meal, or other Corn or Grain ground, for which a Bounty is Payable on Exportation, etc.*—it is stated that doubts had arisen, and these the present Act now solved.

1753.—By 26 Geo. II. c. 15—*An Act for allowing Int. upon certain Debentures for the Bounty granted on the Exportation of Corn*—it appears that at certain ports whereat the collectors had not in hand at the time of export sufficient funds to pay the Bounties provided by some of the Acts cited for the export of corn, Certificates were to be given, and these Certificates, with Debentures attached, were to be presented for payment to the General Receiver or Cashier of the Customs; but the amount of corn exported had been so large that the Funds for the purpose were exhausted, and it was therefore now enacted that all Debentures 6 months or more overdue carry int. at the rate of 3 p.c. p.a. Notice was to be given when Treasury could pay off Debentures.

1757.—There was enacted 31 Geo. II. c. 29—*An Act for the due making of Bread; and to regulate the Price and Assize thereof; and to punish persons who shall adulterate Meal, Flour, or Bread*—which recites (*inter alia*): "And whereas it is expedient to reduce into one Act the several Laws now in force relating to the due making, and to the Price and Assize of Bread, and to make some alterations in, and amendments to the same." From 29 Sept. 1758, the Acts of Hen. III. and of Anne were repealed; and there was enacted a "General Ordin. for setting an Assize and Price of Bread." The assize was to be regulated by the price grain, meal, and flour bore in the market, and "the profit to be allowed to the baker." All this was set out in Tables appended to the Act, supplemented by Regulations, worked out with the most elaborate care.

1758.—By 32 Geo. II. c. 18—*An Act to [inter alia] . . . appropriate certain Penalties mentioned in an Act made in the last Session of Parl. for the due making of Bread; and to regulate the Price and Assize thereof; and to punish persons who shall adulterate Meal, Flour, or Bread*—one-half of the penalty went to the prosecutor; the other half as the magistrate should direct.

There was pub. this year: *Copy of the Rep. of an Assize of Bread, made in the year 1669, by order of the then Court of Aldermen, with remarks on the Act 31 Geo. II., and an Appendix to explain the Statute 51 Hen. III.*

1762.—By 3 Geo. III. c. 6—*An Act for explaining and amending an Act made in the 31 year of the Reign of his late M. Geo. II., intituled An Act, etc.; so far as the same relates to that part of Gt. Brit. called Scotland; and for rendering the said Act more effectual in that part of the U. K.* The regulations of procedure were very minute.

In the same session was also enacted 3 Geo. III. c. 11—*An Act for explaining and amending an Act made in the 31 year of the Reign of H. late M. Geo. II., intituled An Act for the due making of Bread, and to regulate the Price and Assize thereof; and to punish persons who shall adulterate Meal, Flour, or Bread.* After 1 May, 1763, no "Assized" and "Prized" bread to be made at the same time in the same place.

1765.—Mr. Charles Smith, author of *Tracts on the Corn Trade*, made many curious investigations, with a view to discover the mean ann. consumption of Corn; and reducing it to the standard of wheat, he found it to be at the rate of *about a quarter for each individual*, young and old. He took the pop. of E. and W. for this year to be 6,000,000, and reckoned the consumers of each kind of grain, the quantity consumed by each individual, and hence the whole consumed by man, as follows:

Pop.	Average Consumption per head.		Consumed by Man.
3,750,000 consumers of	Wheat at	1 qr. each	3,750,000 qrs.
739,000	" Barley	1½ "	1,016,125 "
888,000	" Rye	1½ "	999,000 "
623,000	" Oats	2½ "	1,791,225 "
			Consumed by man
In addition to this Mr. Smith exhibited the wheat distilled, made into Starch, etc.			7,556,350
Barley used in Malting, etc.			90,000 qrs.
Rye for Hogs, etc.			3,417,000 "
Oats for Horses, etc.			31,000 "
			2,461,500 "
Total of home consumption			13,555,850
Add. excess of exports over imports			398,624
			13,954,474
Add. seed (one-tenth)			1,395,447
Total growth of all kinds of grain in E. and W. in 1765			15,349,921

This estimate did not include either *Scotland* or *Ireland*, and later inquiries have rendered it prob. that the pop. was under-estimated by nearly one million. It seems also that at that date the proportion for seed ought to have been *one-sixth*, certainly not less than *one-seventh*.

Regarding the estimated consumption p. head : this estimate has been confirmed by a variety of subsequent researches, in various parts of *England*, and in *France*. In this latter country the consumption was found to be about 10 bushels p. head ; but the French consume more bread and less animal food than the English.

1766.—By 6 Geo. III. c. 17—*An Act for explaining and amending so much of an Act made in the 1st year of the Reign of King James II. [1685] intituled, etc., as relates to the City of Lond.*—it is enacted that the same duties which are to be performed by the Justices in Quarter Sessions under the Act of 1685 (and that of 1670) are to be performed in Lond. by the Lord Mayor and Aldermen ; but in Jan. and July, as well as in April and Oct.

1767.—There was pub. Sir James Steuart's famous work : *An Inquiry into the Principles of Political Economy* [produced, it will be remembered, before Adam Smith's *Wealth of Nations*], wherein he lays down this fundamental proposition (afterwards exaggerated and misapplied by Malthus) : 1. The productions of all countries are, generally speaking, in proportion to the number of their inhabitants ; and 2. The inhabitants are most commonly in proportion to the food. He then shows that the food of the earth may be divided into two portions : (A) the natural produce of the earth ; and (B) the portion which is created by human industry. A corresponds to the food of animals, and is the limit of the number of savages. B is the product of industry, and increases (all other things being equal) in proportion to the numbers of civilized men. This branch of the subject will be considered fully under POPULATION.

1770.—By 10 Geo. III. c. 39—*An Act for registering the prices at which Corn is sold in the several Counties of Gt. Brit., and the Quantity exported and imported*—it is recited : "Whereas a regis. of the prices at which Corn is sold in the several counties of Gt. Brit. will be of public and general advantage." It then enacts that Justices at Quarter Sessions were to order weekly returns to be made of the prices of Wheat, Rye, Barley, Oats, Beans, and Big from not less than 2 or more than 6 markets in each county ; and to appoint persons to make such returns. Meal-weighers in London to make return. An account of the quantities of Corn exported and imported, and of the Bounties and Duties paid and received, was to be transmitted ann. to the Treasury by the Commissioners of Customs.

1773.—By 13 Geo. III. c. 43—*An Act to regulate the Importation and Exportation of Corn*—it is recited as follows :

Whereas the several Acts of Parl. heretofore made concerning the Duties and Bounties respectively payable on the Importation and Exportation of Corn and Grain have greatly tended to the advancement of Tillage and Navigation ; yet nevertheless it having been of late years found necessary, on account of the small quantities of corn and grain in hand, and of the shortness of the crops, to suspend the operations of those laws by temporary Stat., whereby the benefits derived from the said Acts of Parl. have been during such emergencies withheld and suspended : And whereas the regulating the Importation and Exportation of Corn and Grain by a permanent law, under such general Rules and Provisions as might render for the time to come such temporary laws unnecessary, would afford encouragement to the Farmer, be the means of increasing the growth of that necessary commodity, and of affording a cheaper and more constant supply to the Poor, and preventing abuse in that article of Trade. May it therefore please Your Majesty, etc.

It was then enacted that no British Wheat be exported when at 44s. p. qr. ; Rye, Peas, or Beans, when at 28s. ; Barley when at 22s. ; nor Oats when at 14s. p. qr. , under penalty of forfeiture of 20s. p. bushel, and the vessel in which the same should be carried. There were exceptions as to export to *Ireland*, and to certain other places named.

By another Act of the same year, the 13 Geo. III. c. 62—*An Act for better regulating the Assize and Making of Bread*—it is recited :

Whereas according to the ancient Order and Custom of the Realm, there hath been, from time immemorial, a Standard Wheaten Bread, made of Flour, being the whole product of the Wheat whereof it was made : And whereas by an Act passed in the 31st year of the reign of Geo. II., intituled, etc. [already mentioned], and by an Act passed in the 3rd year of the Reign of H. present M., for explaining and amending the said recited Act, Two sorts of Bread made of Wheat only are allowed to be made for sale, (that is to say) Wheaten and Household ; whereby the flour, being the whole produce of the wheat, is so divided in the making of bread for sale, as that this Standard Wheaten Bread made according to the ancient Order and Custom of the Realm could be no longer made for sale : And whereas Household Bread, such as is intended by the said Act of Geo. II. to be made for sale, is not generally made for sale, whereby and for want of the said Standard Wheaten Bread continued, many inconveniences have arisen, and many of the inferior classes of the people, more especially, have been under the necessity of buying bread at a higher price than they could afford, to their great hurt and detriment : For remedy whereof, etc.

It was enacted that after 29 Sept. 1773, Standard Wheaten Bread be allowed to be made, baked, and sold. The weight, price, and proportions of the different loaves were again placed under regulation ; and Standard Wheaten Bread was not to be sold as "prized loaves" at one and the same time with "assized loaves" of the same wheaten bread.

1774.—By 14 Geo. III. c. 64—*An Act to explain so much of an Act made in the last Session of Parl. (intituled, etc.), as relates to the method of ascertaining the prices of Corn*—it is set forth that after 1 June this year the prices of Corn, Grain, etc., should mean

the "average prices" under the regulations therein stated. In cases where the prices of grain rose within the prohibited schedule within 20 days after entry at Custom House, the shipping might proceed.

1781.—By 21 Geo. III. c. 50—*An Act for further regulating and ascertaining the Importation and Exportation of Corn and Grain, within several ports and places therein mentioned*—so much of the Acts of 1685, 1732, 1766, and 1773 as relate to determining the price of Middling English Wheat in Kent, Essex, and Lond. is repealed, and the prices in these places in future to be regulated by the prices ascertained in the City of Lond. by the Inspector of the returns of the Factors in the Corn Exchange.

Dr. Falconer pub.: *Remarks on the Influence of Climate, Situation, Nature of Food and Way of Life, on the Disposition and Temper, Manners, etc., of Mankind.*

1789.—By 29 Geo. III. c. 58—*An Act for better regulating and ascertaining the Importation and Exportation of Corn and Grain; also for the better regulating the Exportation of Starch and the Importation of Rape Seed*—the regulations of the Act of 1781 were modified to the extent that the Inspector of Corn Returns was to receive from every Corn Factor in London and the suburbs a weekly return of the Corn brought into the Thames eastward of London Bridge, which was sold by him during the preceding week. One halfpenny was to be charged on every "Last" contained in such returns, or 1d. if foreign corn. With many other most elaborate details.

1790.—There was pub. by Robert Applegarth: *A Plea for the Poor; or, Remarks on the Price of Provisions, etc.; the Peasant's Labour; the Bounties allowed on the Exportation of Corn, especially Wheat; with Proposals for their Emendation.*

1791.—There was enacted 31 Geo. III. c. 30—*An Act for regulating the Importation and Exportation of Corn, and the payment of the Duty on Foreign Corn imported, and of the Bounty on Brit. Corn exported*—which recites:

Whereas the Laws now in force regulating the Importation and Exportation of Corn, and the payment of the Duty on Foreign Corn imported, and of the Bounty granted on Brit. Corn exported, require amendment; and it is expedient that certain parts of the said Laws should be continued, and new provisions made, and that the same should be comprised in one Act of Parl.

It therefore enacted the repeal of the Acts of 1685, 1688, 1732, 1770, 1773, 1781, 1789, and all other Acts relating to the importation of grain, of all kinds. The provisions of the Act of 1663 as to buying corn to sell again, and laying it up in granaries, were also repealed. Then follow a long series of most elaborate regulations in view of the purposes of the Act, extending in all to 94 sections, now long since happily repealed. As an example of its technical nature, there was permission to export from the port of Southampton to the Channel Isles 9800 quarters of Grain, Meal, etc., within 2 years, and no more. Malt made for export exempted from operation of Act.

1793.—By 33 Geo. III. c. 65—an Act to amend the Act of 1791—many of the provisions of that Act are repealed and others substituted, in regard to the receivership of corn returns from which to deduce the weekly prices. This Act consisted of 21 sections, some of them very complex.

1795.—There was pub.: *Considerations on the Scarcity and High Price of Bread-corn and Bread at the Market; suggesting the Remedies, in a Series of Letters; first printed in the "Cambridge Chronicle," and supposed to be written by Governor Pownall.* 8vo.

1797.—By 37 Geo. III. c. 98—*An Act to amend and render more effectual an Act, made in the 31 year of the Reign of H. late M. King Geo. II., intituled An Act, etc. [already cited in full], so far as the same relates to the Assize and making of Bread to be sold in the City of Lond. and the Liberties thereof, and within the Weekly B. of Mort. and within 10 miles of the Royal Exchange*—Corn Meters were to enter in a book at the Corn Meter's office every Monday accounts of the wheat worked and delivered by them respectively in the preceding week. And many other minute regulations were laid down.

In Sir Frederic Morton Eden's great work: *The State of the Poor; or an Hist. of the Labouring Classes in England, etc.*, is given an appendix: "Containing a Comparative and Chronological T. of the Prices of Labour, of Provisions, and of other Commodities," etc. From this work we have quoted in the present art. He speaks of the importance of registering the price of the chief item of the food of the people, as the most accurate measure of the value of labour.

1798.—The great work of Malthus—*Essay on the Principles of Population*—was first pub. this year, wherein occurs the following passage:

I certainly think that, in preference to the interest of a particular State, a restriction upon the importation of foreign corn may sometimes be advantageous; but I feel still more certain that, in reference to the interests of Europe in general, the most perfect freedom of trade in corn, as well as in every other commodity, would be the most advantageous. Such a perfect freedom, however, could hardly fail to be followed by a more free and equal distribution of capital, which, though it would greatly advance the riches and happiness of Europe, would unquestionably render some parts of it poorer and less populous than they are at present; and there is little reason to expect that individual States will ever consent to sacrifice the wealth within their own confines to the wealth of the world.

Such is the measure of knowledge of the principles of Free Trade which then existed.

1800.—Dr. Edward Gardner pub.: *Reflections relative to Pop., Provisions, etc.* This work will be more particularly noticed under POPULATION.

1802.—The seasons of 1799 and 1800 were "bad," and the consequent dearth in 1801 and 1802 produced great distress. Parl. Committees inquired into the means of supplying people with food. Before one of these Committees the following return was made :

Year.	Average price of the Winchester quarter of Wheat, Windsor prices.	Corn Returns.	Burials in England.
	<i>s. d.</i>	<i>s. d.</i>	
1798	54 0	50 3	187,531
1799	75 8	67 6	189,586
1800	127 0	113 7	208,063
1801	128 6	118 3	204,434
1802	67 3	67 5	199,889

1803.—By 43 Geo. III. c. 105—*An Act to permit the Exportation, for two years, of a certain quantity of Corn, Grain, Meal, Flour, Bread, Biscuit, or Pulse, to the Islands of Guernsey, Jersey, and Alderney, from other Ports in England as well as the Port of Southampton, under certain restrictions*—it is enacted that, while the places of shipment may be increased, the total quantity of 9800 quarters is not to be exceeded.

By the 45 Geo. III. c. 63 (1805), this Act is made perpetual.

1804.—By 44 Geo. III. c. 109—*An Act to regulate the Importation and Exportation of Corn and the Bounties and Duties payable thereon*—so much of the Act of 1791 as related to the prices at which corn might be exported or imported to Gt. Britain, etc., was repealed, and new regulations as to the average prices at which importation and exportation should be permitted were enacted. This was not to extend to the intercourse of corn between Gt. Brit. and Ireland.

A writer in the *Edinburgh Review* (1829) instituted the following comparison : The year 1801 was a year of extreme scarcity. The number of births regis. in E. and W. was 237,000, and the number of regis. burials 204,000 ; whereas in 1804, which was a year of plenty, there were no fewer than 294,000 regis. births, and only 181,000 regis. burials : being an excess in the latter year of 57,000 births, and a diminution of burials, although out of a larger pop.

1805.—By 45 Geo. III. c. 86—*An Act to explain and amend an Act made in the last Session of Parl., to regulate the Importation and Exportation of Corn, and the Bounties and Duties payable thereon*—some of the regulations of the Act of 1804 are repealed, and it was enacted that the importation and exportation of Corn, etc., into and from Gt. Brit. should be regulated by the average prices of the 12 maritime districts of E. and W. as ascertained by the returns required by the Act of 1791. Orders in Council as to importation of Corn from Brit. Colonies in America to continue in force for 6 months.

Same year there was enacted 45 Geo. III. c. xxiii. [Local and Personal]—*An Act for amending an Act passed in the 37th year of H. present M., to amend and render more effectual an Act made in the 31st year of H. late M., for the due making of Bread, and to regulate the Price and Assize thereof, and to punish persons who shall Adulterate Meal, Flour or Bread, so far as the same relates to the Assize and Making of Bread to be sold in the City of London, and the Liberties thereof, and within the Weekly B. of Mort., and 10 miles of the Royal Exchange.* (See 1815.)

1806.—By 46 Geo. III. c. 97—*An Act to permit the free Interchange of every species of Grain, between Gt. Brit. and Ireland*—it is recited : "Whereas it is expedient that the free importation and exportation of all Corn and Grain, Meal, Flour, Bread, and Biscuit, reciprocally to and from Gt. Brit. and Ireland, should be allowed, and that all Restraints, Duties, and Bounties relating thereto should cease." Whereupon it was enacted that all Bounties and Duties payable on interchange of Corn between these two divisions of the Kingdom should cease.

1808.—Mr. W. T. Comber pub. : *An Inquiry into the State of National Subsistence, as connected with the Progress of Wealth and Pop., etc.*, wherein much valuable information will be found upon the operation of the effect on the people of the legislative enactments herein reviewed. [Pop.]

1818.—A Select Parl. Committee was appointed this year to inquire into the State of the Laws affecting the Corn Trade. This Committee recommended in its Rep. (dated 11 May) a very great increase of the prices at which exportation was allowable, and when importation free of duty might take place. It will be seen by the table at the end of this art. that the home price of Corn was now very high ; and hence this Committee exhibited a marked solicitude to exclude all foreigners from competition with home-growers. Parl. happily did not indorse this view.

There was enacted this year the 53 Geo. III. c. 116—*An Act to alter and amend Two Acts of the 31st year of King Geo. II., and the 13th year of His present Majesty, so far as relates to the Price and Assize of Bread to be sold out of the City of Lond. and the Liberties thereof, and beyond the Weekly B. of Mort., and 10 miles of the Royal Exchange.* This was a most formidable measure, filling up many pages of the Stat. book ; but happily long since repealed.

1814.—This year a series of Resolutions were voted by the House of Commons, declaring that it was expedient to repeal the Bounty on exportation of grain, to permit the free exportation whatever might be the home price, and to impose a graduated scale of duties on the importation of foreign corn. Corn imported from Canada, or from the other Brit. Colonies in N. America, only to pay half the duties of that from other places. Two Bills embodying these provisions were introduced to the House, but one only was passed, viz.:

54 Geo. III. c. 69—*An Act to permit the Exportation of Corn, Grain, Malt, and Flour, from any part of the U.K., without payment of Duty or receiving of Bounty.*

1815.—By 55 Geo. III. c. 26—*An Act to amend the Laws now in force for regulating the Importation of Corn*—it is recited, "Whereas it is expedient to amend the laws now in force relating to the Importation of and Trade in Corn," and then enacted that foreign corn meal or flour might be respectively imported into the U.K. "for home consumption," under and subject to the Provisions and Regulations now in force, without payment of any duty, whenever Wheat should be at or over 80s. p. qr., Rye, Peas, and Beans, 50s., Barley "Beer or Bigg" 40s., and Oats 27s. p. qr. There was, however, an exception in favour of the importation of corn, etc., from the "British Colonies in N. America." From thence wheat might be brought in when the price was at or above 67s. p. qr., Rye, Pease, and Beans, 44s.; Barley Beer or Bigg, 33s., and Oats 22s. p. qr. At other times indeed foreign corn, etc., might be brought in and warehoused; but it could only be taken out of warehouse for consumption when the prices were at or above those stated. This was known as Mr. Robinson's Act. There was much public disturbance while the measure was before Parl.

Same year there was enacted 55 Geo. III. c. xcix. [Local and Personal]—*An Act to repeal the Acts now in force relating to Bread to be sold in the City of Lond., and Liberties thereof, and within the Weekly B. of Mort., and 10 miles of the Royal Exchange; and to prevent the Adulteration of Meal, Flour, and Bread, and to regulate the weights of Bread within the same limits.* This Act was amended in 1819 by 59 Geo. III. c. cxxvii. [Local and Personal]; and in 1820, by 60 Geo. III. c. i. [Local etc.] it was continued to 24 June that year; and by 1 Geo. IV. c. iv. [Local etc.] it was extended to 24 June, 1822. (See 1822).

In Mr. Joshua Milne's *Treatise on Annuities*, etc., pub. this year, his first T. is one "Exhibiting the progress of the pop. of E. and W. and the price of wheat from the year 1780 to 1810." We do not propose to quote that T. here; but the remarks which accompany it deserve to be noticed:

It will be observed, that any material reduction in the price of wheat is almost always accompanied by an increase both of the marriages and conceptions, and by a decrease in the number of burials; consequently by an increase in the excess of births above the deaths. Also, that any material rise in the price is generally attended by a corresponding decrease in the marriages and conceptions, and by an increase in the burials; therefore by a decrease in the excess of the births above the deaths. Thus it appears, that an increase in the quantity of food, or in the facility wherewith the labouring classes can obtain it, accelerates the progress of the pop., both by augmenting the actual fecundity, and diminishing the rate of mort.; and that a scarcity of food retards the increase of the people, by producing in both ways opposite effects.

The theory of the increase of fecundity by reason of the food supply has been controverted. (See Pop.)

Mr. C. Culverhouse pub. 1815: *Arrangement of the Bread Laws, with an Historical Introduction, and some Curious Specimens of the Ancient Bread Laws, and Tables exhibiting the Price and Assize of Bread from the Price of Wheat and Flour.*

1816.—Mr. Dugald Bannatyne delivered before the Literary and Commercial So. of Glasgow an essay: *Obs. on the Principles which enter into the Commerce in Grain, and into the Measures for supplying Food to the People.* The substance of which was afterwards pub., and attracted considerable attention.

1820.—There was pub. this year a work with the expressive title *There's Death in the Pot*, by Frederick Accum, which attracted great attention at the time: for its revelations were quite startling; but as it dealt mainly in generalities, its effect soon passed away.

1821.—By 1 & 2 Geo. IV. c. 87—*An Act to repeal certain Acts, etc., for regulating the importation and exportation of Corn, Grain, Meal, and Flour, into and from Gt. Brit., and to make further provisions in lieu thereof*—the Acts of 1791, 1793, 1804, and 1805 were repealed, and a new mode of obtaining weekly returns of the price of Corn from 148 towns specified in the Stat. was enacted. This Act consisted of 50 sections.

1822.—By 3 Geo. IV. c. 60—*An Act to amend the Laws relating to the Importation of Corn*—an attempt was made to meet the rise or fall in prices of grain consequent upon importation and exportation under the previous Acts, more especially that of 1815.

There was also enacted 3 Geo. IV. c. cvi. [Local and Personal]—*An Act to repeal the Acts now in force relating to Bread to be sold in the City of Lond., and the Liberties thereof, and within the Weekly Bills of Mort., and 10 miles of the Royal Exchange; and to provide other Regulations for the making and sale of Bread, and preventing the Adulteration of Meal, Flour, and Bread within the limits aforesaid.* This was a lengthy and highly penal measure: and may be regarded as the first effectual step in that new and highly necessary crusade against *Adulteration of Food* in any of its forms, concerning which we

shall have more to say hereafter. This measure was simply of a Local, and, so far, of an experimental character. (See 1836.)

1824.—By 5 Geo. IV. c. 50—*An Act for amending an Act passed in the 53rd year of the Reign of H. late M. King Geo. III., intituled An Act* [already cited in full]—the allowance made to Bakers under the Act of 1813 was to be reduced in manner herein mentioned. Then the following :

II. And be it further enacted, That neither this Act nor anything herein contained shall extend or be construed to extend to prejudice the ancient Right or Custom of the two Universities of *Oxford* or *Cambridge*, or either of them, or of their or either of their Clerks of the Market, or the practice within the several Jurisdictions of the said Universities, or either of them, used to set, ascertain and appoint the Size and Weight of all sorts of Bread to be sold or exposed to sale within their several jurisdictions; but that they and every of them shall and may severally and respectively from time to time, as there shall be occasion, set, ascertain and appoint, within their several and respective jurisdictions, the assize and weight of all sorts of Bread to be sold or exposed to sale by any Baker or other person whatsoever within the limits of their several jurisdictions: and shall and may inquire into and punish any breach thereof fully and freely in all respects as they used to do, and as if this Act had never been made; anything herein contained to the contrary thereof notwithstanding.

1825.—By 6 Geo. IV. c. 111—*An Act for granting Duties of Customs*—Duties on Buckwheat and Indian Corn were imposed, viz. Buckwheat £25 p. qr., and Indian Corn p. scale.

1826.—By 7 & 8 Geo. IV. c. 3—*An Act to confirm an Order in Council for allowing the Importation of Foreign Oats, Oatmeal, Rye, Pease and Beans; to indemnify all persons who have advised or acted in execution of the same; and to permit the Importation of such articles until 15 Feb. 1827*—we begin to arrive at an idea of the inextricable confusion which was resulting from modern attempts to regulate the price of Food by Act of Parl.

1827.—By 7 & 8 Geo. IV. c. 57—*An Act to permit until the 1st May, 1828, certain Corn, Meal, and Flour to be entered for Home Consumption*—it is recited :

Whereas it is expedient to permit for a limited time certain Corn, Grain, Meal, and Flour to be entered for Home Consumption, upon payment of the respective duties hereinafter mentioned, although such Corn, Grain, Meal, or Flour may not, at the time of such entry, be admissible for Home Consumption under the provisions of the Laws now in force for regulating the Importation of Corn, or may be admissible only on payment of higher duties,

Thus when the price was 62s. and under 63s. p. qr., the duty was to be £1 or. 8d.; and for every 1s. of advance in price the duty was to be decreased 2s., until at the price of 72s. the import duty would only be 1s. p. qr. But when the price was under 62s., the duty was to be £1 2s. 8d. Barley and Oats were regulated in a like manner. This was really a trial trip for the sliding scale of 1828.

In the same year there was enacted 7 & 8 Geo. IV. c. 58—*An Act to make Provision for ascertaining from time to time the Average Price of British Corn*—by which the Act of 1821 is repealed (except in so far as it repealed the Acts named therein), and weekly returns of the prices of British Corn were to be made from a long list of towns therein mentioned. A Comptroller was to be appointed, and a Deputy if necessary; and an Inspector and Deputy in Lond., who were not to be millers or dealers. The average prices when ascertained as the Act directs were to be pub. in the *London Gazette*. The Act had 42 clauses, with a full measure of penalties for non-compliance.

1828.—By 9 Geo. IV. c. 60—*An Act to amend the Laws relating to the Importation of Corn*—there came into force what was long designated as the "Sliding Scale," whereby wheat was allowed to be imported from any foreign country on payment of a duty of £1 5s. 8d. p. qr., whenever the average price of all England was under 62s. and not under 61s. When the price was 62s. and under 63s., the duty was to be £1 4s. 8d.; and thence it gradually reduced as the price rose, until it fell to 1s., when the average price was 73s. and upwards. A scale was also applied on the same principle for barley, oats, rye, pease, beans, meal, etc. This was the beginning of the end. This Act repealed the Acts of 1815, 1822, the second Act of 1827, and so much of the Act of 1825 as related to Buckwheat and Indian Corn. There was a special scale of duty for grain imported "from any British Possession in North America, or elsewhere out of Europe," viz. when wheat was under 67s. p. qr., the duty was to be 5s.; when above, 6d. Barley under 34s. p. qr., 2s. 6d. duty; above, 6d. Oats up to 25s. p. qr., 2s.; over, 6d. Rye, Pease and Beans up to 41s., duty 3s.; over, 6d. There were new regulations for ascertaining average prices. The Act consisted of 48 sections and a schedule.

1830.—In Mr. M. T. Sadler's great work, *The Law of Population*, it is contended, and the contention is to all appearance supported by the evidence of statistics, that cheap food (he takes his example from the price of wheat) does not increase the fecundity of the people, *inter se*. There may be more marriages, and hence more births; but the power of fecundity is not itself increased by means of cheap food.

1835.—By 5 & 6 Wm. IV. c. 13—*An Act to regulate the Importation of Corn into the Isle of Man*—it is made manifest that whereas the produce of the Isle of Man could be imported into the U.K. without payment of any duty; and none of the many Acts recited had levied any duty upon foreign grain imported there; that a pretty brisk trade had resulted in the shape of importation thence, and exportation from thence to other parts of the U. K. This "weak place" was now stopped—the duties were extended to it.

Dr. Robey Dunglison, M.D., pub. this year in Philadelphia a work, *On the Influence*

of Atmosphere and Locality, Change of Air and Climate, Seasons, Food, Clothing, etc., on Human Health, constituting the Elements of Hygiene. 2nd ed. pub. under title Human Health, Phila. 1844.

1836.—There was enacted 6 & 7 Wm. IV. c. 37—*An Act to repeal the several Acts now in force relating to Bread to be sold out of the City of Lond. and the Liberties thereof, and beyond the Weekly B. of Mort. and 10 miles of the Royal Exchange; and to provide other regulations for the making and sale of Bread, and for preventing the Adulteration of Meal, Flour, and Bread beyond the Limits aforesaid.* This is therefore the first modern measure of general application to the country; and it recites (*inter alia*):

And whereas it is deemed expedient that the several Acts of Parl. now in force relating to the making and selling of Bread, or to the Assize and Price thereof, or to the Adulteration of Meal, Flour, or Bread, beyond the Limits aforesaid, should be altogether repealed, and that in lieu thereof the Regulations, Provisions, and Penalties hereinafter contained, and which are similar to those contained in the said recited Act [3 Geo. IV. c. cvi. 1822], should be substituted. But inasmuch as the purposes aforesaid cannot be effected without the aid and authority of Parl. Be it, etc.

It is then enacted that it should and might be lawful for the several makers and sellers of Bread outside the limits of the City [as those inside the City had been authorized by the recited Act] to make and sell Bread made of Flour or Meal of Wheat, Barley, Rye, Oats, Buckwheat, Indian Corn, Peas, Beans, Rice or Potatoes, or any of them, and with any Common Salt, Pure Water, Eggs, Milk, Barm, Leaven, Potatoes, or other Yeast, and mixed in such proportions as they should think fit, and with no other ingredient or matter whatsoever, subject to the Regulations in this Act contained. And the Bread might be made of any weight or size; but was to be sold by weight only, except as to certain Fancy Bread and Rolls. There were heavy penalties for adulteration; and Bakehouses might be searched.

1838.—By 1 & 2 Vict. c. 28—*An Act to repeal the several Acts now in force relating to Bread to be sold in Ireland, and to provide other regulations for the making and sale of Bread, and for preventing the Adulteration of Meal, Flour, and Bread in that part of the U.K. called Ireland*—it is recited:

And whereas it is deemed expedient that the several Acts now in force relating to the making and selling of Bread, or to the Assize and Price thereof, or to the Adulteration of Meal, Flour, or Bread, in that part of the U.K. called Ireland, should be altogether repealed, and that in lieu thereof the Regulations, Provisions and Penalties, hereinafter contained, and which are similar to those contained in the said recited Act [of 1836], should be substituted.

The enactments following conform to those of 1836; so that the whole of the U.K. was now brought under a uniform law in these matters, for the first time.

This year, on the 18th Sept., the Anti-Corn Law League, which sprang from various metropolitan and provincial asso., was founded in Manchester. Its first active supporters were Charles Villiers, Richard Cobden, John Bright, etc.

1841.—Mr. Thomas Doubleday pub.: *The True Law of Pop. shown to be connected with the Food of the People.* This, with many other works of a kindred character, will be reviewed in some detail under POPULATION.

1841-2.—In a valuable paper read before the Philosophical So. of Glasgow this year by Dr. R. D. Thomson, and pub. in the *Trans.* of the So. for the 14th Session, after noticing the number of deaths in England by starvation, or purely from want of Food, says, "How many persons die by piecemeal starvation, or by disease engendered by bad food, or want of it, has not yet been pointed out by statistical data." He also said:

We trust the day is fast approaching when the light of science will enable the guardians of the poor to manage our poverty-stricken fellow-men by precise and definite rules, and will teach all classes of the community that the quantity of vital air supplied by the Creator to man is based on fixed laws which require the imbibition of a certain amount of food. An adult consumes every day 30½ ounces of oxygen or vital air from the atmosphere. To consume this and to convert it into carbonic acid, he requires, according to Liebig, about 13 ounces of carbon in the form of food. If the food is withheld, the carbon must be supplied from the muscles and substance of the body: the latter becomes thinner and weaker, and like an expiring taper is extinguished by the influence of the most trivial causes.

1842.—By 5 & 6 Vict. c. 14—*An Act to amend the Laws for the Importation of Corn*—the Act of 1828 is repealed, and new provisions made in lieu thereof. This was known as the "Reduced Sliding Scale Act." The Duty on Wheat imported from any foreign country, when the price was under 50s. in the U.K., was to be £1, reducing 1s. as the price advanced up to 73s. and beyond, when the minimum duty of 1s. p. qr. was reached. For Barley when under 26s. a duty of 11s., reducing with the advance of price up to 37s., when 1s. minimum duty. Oats under 19s. duty of 8s., reducing with advance of price until 27s., when the minimum duty became 1s. For Rye, Peas, and Beans under 30s., duty 11s. 6d., reducing with increase of price to minimum of 1s. Meal, etc., correspondingly graduated. But when grain was imported from British possessions, Wheat under 55s. paid a duty of 5s.; 58s. and upwards, 1s. Barley under 28s. duty 2s. 6d., graduated to 6d. when price 31s. and upwards. Oats under 22s., 2s. duty, graduated to 23s. when duty 6d. Rye, Pease, and Beans, under 30s., duty 3s., graduating to 34s. when duty 6d. Meal, etc., correspondingly graduated. Additional regulations as to Corn Returns; Officers of Excise to act as Inspectors; and where any foreign country should unfairly surcharge Brit. vessels carrying grain, etc., H. M. might prohibit importation from such country. Accounts of Corn imported, and of duty, and rates of duty, to be pub.

monthly. An exception in favour of the Universities of *Oxford* and *Cambridge* as to appointment and dismissal of Inspectors of Corn Returns for those places (s. 14). There were 45 clauses and 2 schedules to this Act.

The Rep. of a Committee of the Brit. Asso. for the Advancement of Science: *On the Vital Statis. of the Large Towns of Scotland*, pub. this year, contained the following passage:

Though we may not be able to trace the effects of destitution in its different stages on the increase of disease and death, yet by the improvement of registers, and by greater attention to the Vital Sta. of different localities, and of different classes of the people, more certain knowledge may be obtained on this most important subject. The proof, however, which the preceding T. afford that the mort. for the different towns is in proportion to the amount of the poor and destitute in these towns, is supported by the amount of burials which take place in them at the public expense.

In Prof. Liebig's *Rep. on Organic Chemistry applied to Physiology and Pathology*—of which an abstract made by Dr. Lyon Playfair appeared in the Rep. of the Brit. Asso. for this year—there is the following:

Food is either applied in the increase of the mass of a structure (i.e. *in nutrition*), or it is applied in the replacement of a structure wasted (i.e. *in reproduction*). The primary condition for the existence of life is the reception and assimilation of food. But there is another condition equally important—the continual absorption of oxygen from the atmosphere. All vital activity results from the mutual action of the oxygen of the atmosphere and the elements of food. All changes in matter proceeding in the body are essentially chemical, although they are not unfrequently increased or diminished in intensity by the vital force. . . .

The subject will be followed up under LIFE, HUMAN.

1845.—Mr. John Smith pub. a most excellent little book: *Fruits and Farinacea the Proper Food of Man; being an Attempt to Prove from History, Anatomy, Physiology, and Chemistry, that the Orig., Natural and Best Diet of Man is Derived from the Vegetable Kingdom*. No person not having read this work can properly regard himself as even fairly acquainted with this subject of Food.

1846.—At length came the time and the man. The Food of the people was no longer to be made the pretext for "unnatural legislation." Sir Robert Peel swept away the whole fabric of failures which his predecessors had built up, and which we have here passed in review; and the policy of "Free Trade" in the essential portion of the Food of the people was for once, and, so far as the U.K. is concerned, for ever proclaimed! In this enlightened step we discover an element of encouragement to the expansion of Life Ins. among the industrial classes which must always be wanting where artificial restrictions and consequent uncertainty prevail. [LIFE INS., HIST. OF.]

By the 9 & 10 Vict. c. 22—*An Act to amend the Laws relating to the Importation of Corn*—it was enacted that on and after 1st Feb. 1849, the duties upon all foreign corn imported into Gt. Brit. and the Isle of Man should be as follows: upon Wheat, Barley, Bear or Bigg, Oats, Rye, Pease, and Beans, 1s. p. qr.; and upon Meal from any of the same 44d. p. cwt. But in the mean time the duty on Wheat imported "from any Foreign Country" to be as follows: when the average price under 48s., duty 10s., decreasing as the price increased to 53s. and upwards, when the minimum duty of 4s. p. qr. came into force. A similar scale of graduation for other kinds of grain. (See 1869.)

It will be remembered that the failure of another important article of Food—the *Potato*—at this period, facilitated the passing of the preceding law.

The Anti-Corn Law League (founded 1838) was formally dissolved this year.

The Reg.-Gen., in his 9th Ann. Rep., reviewing the scarcity of food at this period, occasioned very much by the failure of the potato crop in Ireland, pointed out why such disasters were not so fatal to the people as was formerly the case:

The quantity of food which a country imports does not depend merely on its wants; it depends on its ability to pay for food from abroad; the ability itself varying with the people's powers of production and the prices of commodities in the foreign market. A purely agricultural ill-cultivated country, such as *England* was in the middle ages, and such as parts of *Ireland* and *France* are, suffers more from the failure of a crop than a pop. like that of *England* now, whose income is derived from the several sources of agriculture, manufactures and commerce. It is not the less true that the partial destruction of the crops is an immense loss to the country.

In the same year (1846) Dr. Farr read before the Statistical So. of Lond. a most valuable paper: *The Influence of Scarcities and of the High Prices of Wheat on the Mort. of the People of England* [*Statis. Journ.* vol. ix. p. 158], wherein he says:

If we may judge from the habits of the best and most vigorous races, man would appear to be able to live on great varieties of food; but in respect to the quantity of nutritive matter, the law of his system is less flexible. In the cold, or engaged in hard work, he requires a large quantity of nutriment, and he soon becomes unable to take active exercise if the supply fall below a given point. Dalton—and subsequently Liebig—have shown that a certain number of ounces of carbon is burnt in the body, to keep up its slightly-varying temperature; and that nitrogenous matter is required to replace the particles destroyed in the evolution of sensation, muscular action, and other functions.

After reviewing the periods of scarcity in the hist. of Gt. Brit., and the prices of provisions at various periods, he proceeds:

The causes of a high mort. are various, but the greater number of known causes may be referred to 5 heads—1. Excessive cold or heat. 2. *Privation of food*. 3. Effluvial poisons generated in marshes, foul prisons, camps, cities; and epidemic diseases, such as typhus, plague, smallpox, and other zymotic diseases. 4. Mechanical and chemical injuries. 5. Spontaneous disorders to which the structure of the human organization renders it liable. The first three classes of independent causes vary in intensity from year to year; and as *each* will separately produce the effect which we are investigating, namely, an increase of deaths, it must be evident that this effect will not always vary as privation, or as *any one* of the class of causes. For instance, the Sweating Sickness, said to

have broken out in Richmond's camp, spread through England and destroyed great numbers. It was a poison in the air, and, like other poisons, its fatal action was not stopped by abundance of food, although its ravages, if aided by famine, might have been rendered more deadly. So of the Black Death in 1348, the Plague of 1665, the Cholera of 1832.

Then, low prices do not always denote plenty, nor high prices scarcity. And if high prices increase the mort., any great mort. has a tendency to increase the price of provisions. Thus in 1349 "the price of every kind of cattle was much reduced; they wandered about in herds without herdsmen. Corn of all kinds was so abundant that no one gathered it." Workmen were scarce, a "great part" of them having been destroyed, and demanded high wages.

These great disturbing causes and the imperfections of the returns require, for the elimination of their effects, a series of obs. extending through a century. The concurrent evidence of the 17th and 18th centuries appears to me to justify the inference that high prices of wheat—I mean relatively high—irrespective of the other necessities of life, had then a tendency to increase the mort. of Lond.

Much other information of interest is contained in this paper, some of which we have used in other parts of this work.

1848.—Mr. J. T. Danson, F.R.S., read before the Statistical So. of Lond. a paper: *A Contribution towards an Investigation of the Changes which have taken place in the Condition of the People of the U.K. during the 8 Years extending from the Harvest of 1839 to the Harvest of 1847; and an Attempt to develop the Connexion (if any) between the Changes observed and the Variations occurring during the same Period, in the Prices of the most necessary Articles of Food.* This, like all the writings of the same author, is marked by many points of careful observation and philosophic reflection; while the statistics it contains are valuable.

1849.—Dr. Lyon Playfair pub. an important treatise: *On the Food of Man in relation to his Useful Work.* This book should be consulted by all who desire to comprehend the full bearings of the effect of food on the human system.

1851.—This year forms the commencement of an important era in regard to the matter of Food; for with it commenced the labours of the "Analytical Sanitary Commission," appointed by the proprietors of the *Lancet*. By way almost of apology for the good work upon which they were entering, the editors say in their issue of 4th January:

... We have our Boards of Health, and our Commissioners of Sewers, which take ready cognizance of questions of air and light, effluvia and water. The whole force of the State is brought to bear upon the poisoning and deterioration of human blood, by miasms, by impure water, and by the absence of ventilation in our cities and dwellings. But with the exception of the appointment of officers to report upon diseased meat or fish, the public authorities take no cognizance whatever of the deterioration and poisoning of our bodies by the slower but equally sure modes, of adulterations of food and drink. Questions of weight and measure are decided by the magistrates. The tradesman whose weights and balances are erroneous or unfair is summarily punishable: he must not measure an article unfairly, or fine and imprisonment will surely overtake him, upon his detection; but it appears that he has hitherto been allowed to substitute one article for another with the most perfect impunity. As regards weight, the pound of "coffee" must be correct to the pennyweight; but as regards quality it may consist of one part coffee, and three parts chicory and roasted grain; and so on of a hundred other articles of consumption besides coffee, as we shall show in subsequent articles.

It cannot but strike every one as most extraordinary that this vitally important question should have remained in comparative neglect up to the present time. Organic chemists, Prout, Liebig, Dundas, Thomson, and others, have devoted the aids and appliances of modern chemistry with the utmost success to the analyses of the ultimate elements of the solids and fluids which nourish the living body; but little or nothing has been done, or even attempted, in the systematic detections of adulterations of these great and universal agencies of health and disease. (See 1855.)

1852.—Dr. W. A. Guy, M.B., contributed to the Statistical So. of Lond. a paper: *On the Relation of the Price of Wheat to the Revenue*; and the same was read before the So. and is printed in its Journal, vol. xvi. p. 53. The main conclusions the author arrived at were the following:

2. A comparison of groups of years of high and low prices of wheat issues in a result highly favourable to the theory that the price of wheat exercises a marked influence on the revenue, and this is especially the case when the years immediately following those of high or of low prices are substituted for the years coinciding with them.

3. The result of these comparisons is rendered still more striking when that portion of the revenue which is derived from wheat and wheat flour, is subtracted from the total net ordinary revenue; and this correction has, at the same time, the effect of diminishing the amount of the irregularities just referred to.

The paper contains many valuable statistics.

1855.—There was pub.: *Food and its Adulterations; composing the Reports of the Analytic Sanitary Commission of the 'Lancet' in the Years 1851 to 1854 inclusive.* By Arthur Hill Hassall, M.D., Chief Analyst of the Commission.

In the *Quarterly Review* for March of this year was contained a most excellent art., based upon this Report and upon some French publications on the same subject; wherein the subject of adulteration of food was considered generally; and the value of the microscope in detecting forms and substances employed in adulteration was made plain.

1857.—Dr. T. Foster, M.B., etc., contributed to the *Assu. Mag.* [vol. vii. p. 148] a paper: *Inquiry into the Average Longevity of Vegetarians, compared with that of Persons who live on a Mixed Diet*, wherein the writer points out that, among the many curious facts regarding the duration of human life to which the practice of Life Ins. has led, "one very essential question" had been left undecided, viz. "whether, and in what degree, a diet of vegetable food alone increases the length of life." His attention had been directed to the effects of different kinds of food on different kinds of constitution for many years past, and the conclusion at which he had arrived was "certainly in the highest degree favourable to the views of the So. [the Vegetarian So. of Manchester] alluded to,

particularly as respects longevity, to which pure vegetarian diet seems to be particularly favourable." He then gives the results of his personal observations, extending over nearly half a century, and made in various countries, as follows:

1. I have observed that the physical powers of porters, boxers, and others, which is for a time upheld by flesh meat alone, always fails in the end, and so far from inducing longevity, conduces to the shortening of life in almost every instance. I have observed the same in almost every country of Europe.

2. In India the average longevity of Brahmins and Hindoos, who live on rice and fruit alone, is higher than that of those sepoys and others who live on mixed diet; but I think a more rigid inquiry into this fact should be made, as Central Asia, with its numerous vegetarian tribes, affords a wide field for useful investigation.

3. In France, Belgium, Germany, and other temperate countries, wherever you find a pure vegetarian, he is freer from disease and longer lived than his neighbours.

4. This subject has been recently illustrated by very able men in the U.S. The result of all the recent inquiries in America has been, that animal food shortens life, and that human existence has been protracted to a length wholly unlooked for by a diet of vegetable matter alone.

5. The diet of the celebrated longevists recorded in hist. had been chiefly vegetarian, as I have ascertained by a very laborious research. This is also eminently the case with certain very great philosophers of the present day; and it is also remarkable that this diet increases the intellectual powers of man to an enormous extent, by inducing a more regular circulation of blood in the brain and nervous system. . . . A vast number of old physicians and surgeons, whom we have known in various countries, were vegetarians; and the freedom of these persons from the ordinary inconveniences of old age, though not so generally known, has been fully proved to me.

He gives some further results of personal observations among Irish labourers, and others—all leading to the same conclusion. We suppose China and Japan might have been added, if his obs. had extended so far.

1858.—The Rev. Charles Best Robinson, M.A., read before the Statistical So. of Lond. a paper: *CHRONICON PRETIOSUM SNATHENSE; or Lists of Prices of various kinds of Agricultural Produce and other Articles, in the Ecclesiastical Peculiar of Snath, in the West Riding of Yorkshire, in the Sixteenth, Seventeenth, and Eighteenth Centuries. Compiled from the Probate Records of the Peculiar.* This constitutes a very important contribution to the hist. of prices.

Mr. P. L. Simmons pub.: *The Curiosities of Food; or the Dainties and Delicacies of Different Nations obtained from the Animal Kingdom.* This is a most excellent work, by an author thoroughly learned in his subject.

1860.—We now reach another and an important stage of our subject—a measure for preventing the adulteration of food and drink generally, viz. 23 & 24 Vict. c. 84—*An Act for Preventing the Adulteration of Food and Drink*—which recites, "Whereas the practice of adulterating articles of Food and Drink for sale, in fraud of H. M.'s subjects, and to the great Hurt of their Health, requires to be repressed by more effectual laws than those which are now in force for that purpose," and then enacts:

1. Every person who shall sell any article of Food or Drink with which, to the knowledge of such person, any ingredient or material injurious to the health of persons eating or drinking such article, has been mixed, and every person who shall sell as pure and unadulterated any article of Food or Drink which is adulterated, or not pure, shall for every such offence, on a summary conviction of the same before 2 Justices, etc., pay a penalty not exceeding £5, together with such costs attending such conviction, as to the said Justices shall seem reasonable; and if any person so convicted shall afterwards commit the like offence, it shall be lawful for such Justices to cause such Offender's Name, Place of Abode, and Offence to be pub., at the expense of such offender, in such newspaper or in such other manner as to such Justices shall seem desirable.

Then there were powers for appointment of "persons possessing competent medical, chemical, and microscopical knowledge as Analysts of all articles of Food and Drink purchased," subject in *Gr. Brit.* to the approval of H. M.'s Sec. of State, and in *Ireland* to that of the Lord Lieutenant. There is also power given to purchasers to have articles analysed; and provision against same being tampered with after purchase. Certificate of analyst to be made evidence. The Act extended to "all Eatables and Drinkables whatever," not being medical drugs or medicines. (See 1868.)

1861.—Dr. Edward Smith, M.D., LL.B., F.R.S., pub. his well-known work: *Health and Disease, as influenced by the Daily, Seasonal, and other Cyclical Changes in the Human System*; wherein the importance of Food in regard to the vital functions of the body is shown in a light more forcible, perhaps, than by any previous writer.

The Rev. James E. T. Rogers, M.A. (Oxford), read before the Brit. Asso. at Manchester a paper: *Facts and Observations on Wages and Prices in England during the 16th and 17th Centuries, and more particularly during the 39 Years 1582—1620; the data principally employed being the Fabric Rolls of York Minster, and the Shuttleworth Household Books.* In this paper is much valuable information regarding prices of food; but as this paper formed in part the basis of the work pub. by the same author in 1866, we need not dwell upon it here. (See 1866.)

1862.—An inquiry was made by direction of the Privy Council into the nourishment of the distressed operatives of Lancashire and Cheshire,—distressed by reason of the "Cotton Famine" then prevailing. This inquiry was conducted by Dr. Edward Smith, M.D.; and in his Rep. was contained a theoretic estimate of the minimum quantity of food on which human life could reasonably be expected to subsist; and that estimate formed the scientific basis for such advice as was given to the Cotton towns on the subject of their allowances for the poor. Its purport was, that in order to avert starvation—

diseases: an average woman's daily food ought to contain at least 3900 grains of carbon, with 180 grains of nitrogen, *i.e.* for the woman about the same quantity of the nutritive elements as is contained in 2lbs. of good wheaten bread; and for the man about one-ninth more.

Dr. Waller Lewis, the medical officer of the General Post Office Staff, in a paper which he read before the Social Science Congress this year: *On the Health of the London Postmen*, says:

I frequently find it necessary to caution the men against the practice of purchasing low-priced but diseased meat in Newgate, and other markets. This used to be, and still is, occasionally, the source of much mischief: producing not only disorders of the intestinal canals; but also, I believe, boils and carbuncles—diseases which have not only increased much in frequency of late years, but also in severity.

Again, in speaking of the particular diseases from which these men mostly suffer, he says: Most of the cases of boils and carbunculoid disease are attributable, in my opinion, to eating unsound or diseased meat, many tons of which are sold in Newgate and the other meat markets of Lond., in add. to the large quantities condemned and seized by the Inspectors of meat.

1863.—The 26 & 27 Vict. c. 40—*An Act for the Regulation of Bakehouses*—recites: "Whereas it is expedient to limit the hours of labour of young persons employed in Bakehouses, and to make regulations with respect to Cleanliness and Ventilation in Bakehouses;" and then proceeds to enact the necessary regulations for accomplishing these most desirable ends, and to give powers for their enforcement.

The 26 & 27 Vict. c. 117—*An Act to amend the Nuisance Removal Act for England 1855, with respect to the Seizure of Diseased and Unwholesome Meat*—gave power to the Medical Officer of Health, or the Inspector of Nuisances, to inspect or examine any Animal, Carcass, Meat, Poultry, Game, Flesh, Fish, Fruit, Vegetables, Corn, Bread, or Flour, and if the same should appear to him to be diseased, or unsound or unwholesome, or unfit for the food of man, to seize and take away the same; and the person upon whose premises such food, etc., should be found, might be fined or imprisoned as the Justice hearing the case should determine.

In the 6th Rep. of the Medical Officer of the Privy Council, relating to this year, p. 10, there is the title: "Distribution of disease in England, and the circumstances by which it is regulated," wherein occurs the following passage:

That no sanitary necessity can be more real than the common animal need of proper food; that no morbid influence can be of worse import to life than mere privation of nourishment; these are propositions which every one feels to be true, when they are illustrated in individual cases of death by starvation, or in those national extreme sufferings of scarcity which constitute famine. But the propositions are not exclusively true in that utmost range of their application. In degrees far short of what is popularly known as starvation or famine, insufficiency of nourishment may bring very hurtful consequences to health. Local defects or local peculiarities of diet may exercise important influence in determining or colouring particular localizations of disease. And generally it may be said, that in order justly to estimate the sanitary circumstances of a people, scientific regard must be had to the quantity and quality of the people's meat and drink.

The Lords of the Privy Council, in this view, caused an inquiry to be made into the dietaries of our lowest-fed populations. This was also conducted by Dr. Edward Smith. The results were highly instructive, but we cannot follow them up, here.

The Rev. J. E. T. Rogers, M.A., read before the Statistical So. of Lond. this year a paper, *On a Continuous Price of Wheat for 105 Years from 1380 to 1484*. The facts contained herein we shall endeavour to make available in the T. to be given at the end of this art.

1864.—The Lords of the Privy Council—with the object of obtaining accurate knowledge as to the states of disease by which animal food is rendered unfit for human consumption, more particularly with reference to then recent advances of scientific experience in some branches of the subject—ordered inquiry to be made as to the prevalence of parasitic disease—and especially of the so-called *trichina spiralis*—in the meat of the London markets; and as to the danger which disease implies of infection to the human consumer. Dr. Thudichum was engaged on this inquiry; and his Rep.—which is far too minute in its details for quotation here, will be found in vol. vii. of the Rep. of the Medical Officer of the Privy Council, p. 303—deserves the most careful consideration in regard to the question now before us.

1866.—Prof. J. E. T. Rogers, F.R.S., pub.: *History of Agriculture and Prices in England*, wherein is contained T. of the prices of commodities in all parts of England between the years 1259 and 1400, and much other information on the subject of Food and prices of a most valuable character. The author says in his preface—referring to the period over which his inquiry extends—

As there were no regular means for supplying deficiencies in the produce of the home market by foreign importations, the prices of necessities, such as corn, give no small insight into the course of the seasons; and supply the best means for discovering a cycle of seasons, if, as I do not dare to assert, such a cycle can yet be found.

1867.—In the 13th Detailed Rep. of the Reg.-Gen. for Scotland, Dr. Stark, in reporting on the deaths, etc., of this year, says:

In countries where the mass of the pop. is dependent for their sustenance on the crops which they raise, and where they have little or no external trade, it is the crops which are the great regulators of the mort., after the weather. For if the crops partially or wholly fail, the price of the food rises so high as to be beyond the power of purchasing by the lower classes. In such countries, therefore, the amount of sickness and death almost invariably rises and falls with the price of the provisions.

When provisions are abundant, and consequently cheap, the amount of sickness is small, and the death-rate low; but a failure of the crops almost invariably brings a high amount of sickness, and the death-rate becomes excessive.

In *Scotland*, during the operation of the Registration Act, he had not found this law in operation.

1868.—There was enacted 31 & 32 Vict. c. 121—*An Act to regulate the Sale of Poisons, and Alter and Amend the Pharmacy Act*—the 24th section of which declares that the provisions of the Act of 1860 as to adulteration of Food and Drink “shall extend to all articles usually taken or sold as medicines, and every adulteration of every such article shall be deemed an admixture injurious to health; and any person registered under this Act who sells any such article adulterated shall, unless the contrary be proved, be deemed to have knowledge of such adulteration.”

1869.—By 32 Vict. c. 14—*An Act to grant certain Duties of Customs and Inland Revenue, and to Repeal and Alter other Duties of Customs and Inland Revenue*—under sec. 4 the Duties and Customs chargeable upon corn and meal in all its numerous varieties, including Arrowroot, Cassava powder, Mandioca flour, Hair-powder, Semolina, Tapioca, Vermicelli, etc., etc., were for ever swept away, as if in vengeance for the barbarities legislation in their assumed behalf had previously invoked. The remaining “shilling duty” on grain, left under the Act of 1846, was the principal item affected. But so long as it remained, a host of vexations in regard to the Food substances already named, and many others, still cropped up. The full measure of Free Trade in Food was only now realized. The various Acts already enumerated, and not here recorded as repealed, have been wiped off the Stat. Book by the labours of the Statute Law Revision Commission.

By 32 & 33 Vict. c. 112, a most useful extension of the measures against adulteration is made. This enactment being shaped to prevent the adulteration of *Seeds*. This is getting down to the very root of the subject!

Mr. Wm. Newmarch, F.R.S., in his Inaugural Address on opening the Session of the Statistical Society of Lond., selected for consideration the state of knowledge in regard to some of the topics falling within the scope of this most useful Soc., and said:

First, as regards the accurate statistical determination of the average consumption of the chief articles of Food among different classes of the pop.—Corn, Butchers' meat, and Colonial produce. At present we cannot speak with any approach to accuracy of the extent and cost of the most vital of all requirements, viz. the Food of the people. We are perpetually guessing at the probable consumption of wheat and other grains p. head—the same of Potatoes and Butchers' meat, and Colonial produce; and until, by a series of extensive and well-devised obs. of rigid statistical facts, we arrive at results entitled to credence, we shall continue to speculate and reason in the dark.

In the absence of such knowledge, we prob. suffer considerably in the cost of products—meat for instance.

1870.—By sec. 3 of 33 & 34 Vict. c. 26—*An Act to regulate the Sale of Poisons in Ireland*—the provisions of the Act of 1860 were made to extend to medicines.

There was pub. this year the *Food Journal*, which rendered important service to the public for several years, and then died of neglect, i.e. pecuniary starvation!

1871.—Mr. John Forbes Watson, Reporter to the Indian Gov. on the Products of India, pub.: *Food, and its Influence on Man*. An important work.

1872.—By 35 & 36 Vict. c. 74—*An Act to amend the Law for the prevention of Adulteration of Food and Drink, and of Drugs*—it is recited that adulteration of such articles “requires to be repressed by more effectual laws than those which are now in force for that purpose;” and then enacted:

1. Every person who shall wilfully admix, and every person who shall order any other person or persons to admix with any art. of Food or Drink any injurious or poisonous ingredient or material to adulterate the same for sale, and every person who shall wilfully admix, and every person who shall order any other person or persons to admix any ingredient or material with any Drug to adulterate the same for sale, shall for the first offence forfeit a penalty not exceeding £50, together with the costs attending such conviction; and for a second offence be guilty of a misdemeanor, and be imprisoned for a period not exceeding 6 calendar months, with hard labour.

Penalties are then inflicted on persons selling articles of Food or Drink which they know to have been adulterated. Where any article of Food or Drink has been “mixed with any other substance with intent fraudulently to increase its weight or bulk,” the vendor to declare the same at the time of sale. The Acts of 1860 and 1868 were incorp. with this Act; as also the Act of 1870. Enlarged powers are given for the appointment of Analysts. Inspectors of Nuisances may submit articles to be analysed. Purchasers of food may require same to be analysed.

The *Food Journal* for Sept. this year said:

Three months ago there was scarcely any hope of an Adulteration Bill being passed; but, thanks to Lord Salisbury in the Lords, and to his brother and Mr. Muntz in the Commons, the Bill was passed through both Houses without any trouble or much observation. If some of the commercial members had observed it, such might not have been the case; hence we have now the delightful spectacle of witnessing manufacturers preparing to tell the people the composition of what they are eating and drinking. It is consolatory to those who have long known the secrets of the trade, and who, being well aware of the rubbish sold under popular names, have done all in their power to put a stop to such barefaced deception, to observe the consternation among certain manufacturers caused by the Adulteration Act of last Session.

By sec. 19 of 35 & 36 Vict. c. 94—*An Act for Regulating the Sale of Intoxicating Liquors*—“Every person who mixes, or causes to be mixed with any intoxicating liquor

of food, and drugs, to be distinctly labelled to that effect. Power to public Officers or Analysts to purchase articles (s. 12), and persons refusing to sell liable to penalty (s. 17). Vendor to be discharged if he prove he bought the article in the same state as he sold it, with a warranty (s. 25). Tea to be examined by Customs on importation, and may be forfeited and destroyed (s. 30). The Act to apply to the three divisions of the U.K.

In his latest important work—*Supplement to the 35th Ann. Rep. of the Reg.-Gen.*—Dr. Farr reverts to the subject of Food, as follows :

... Fruits, salads, and potatoes contain the several vegetable acids which are an indispensable part of diet; in its absence, after the potato failure in 1847, the pop. in many places became moribund. . . . This acid diet demands attention. Its absence lends fatality to certain diseases. The deaths now ascribed in all England directly to privation are at the rate of 3 every fortnight, 77 ann.—the gentler sex dying of starvation in smaller numbers than men.

Again :

Food and work are undoubtedly important factors in determining the lifetime of different professions of various artificers, and of labourers. . . . Haughton, measuring by urea, finds that high mental and mechanical work demands a better quality of food than mere routine labour.

At the meeting of the Brit. Asso. held at Bristol this year, Prof. W. Stanley Jevons, F.R.S., read a novel paper, viz.: *The Influence of the Sun-Spot Period upon the Price of Corn*. After alluding to the attempts made by Mr. Carrington to trace a connexion between the price of corn and the variations in the sun-spots during portions of the last and present centuries, the Prof. said that Mr. Schuster has pointed out that the years of good vintage in Western Europe have occurred at intervals approximating to 11 years, the average length of the principal sun-spot period. The elaborate collection of the prices of commodities in all parts of England between the years 1259 and 1400, pub. by Prof. Rogers, appeared to afford the best data for deciding whether the sun-spot period influences the price of corn. For this purpose, tables of the average prices p. qr. of wheat and other grain, expressed in grains of pure silver, were used. Each series of prices was divided into intervals of 11 years, which were ranged under each other and averaged, so as to give the average of the first, of the second, of the third, etc., years, the commencement of the period being arbitrarily assumed. It is found that the prices of each kind of produce examined rises in the first four years, but afterwards falls. It is further shown that the maxima prices are found to fall into the tenth, eleventh, first, second, and third years of the assumed 11-year period. These results are to be looked upon as only preliminary, and need further investigation. It is also pointed out that commercial panics have tended to recur during the last 54 years in a distinctly periodic manner. The average length of interval between the principal panics is about 10.8 years, nearly coinciding with 11.11, the length of the solar-spot period. If Prof. Balfour Stewart be right in holding that the sun-spot variation depends on the configuration of the planets, it would appear that these configurations are the remote cause of the greatest commercial disasters. This is but a meagre outline of the remarkable paper.

The inhabitants of the U.K. consumed this year 1,186,641 cwt. of beef from imported live cattle; 454,007 cwt. of mutton from imported live sheep; 71,927 cwt. of pork from imported live swine; 3,114,809 cwt. of imported dead meat—i.e. bacon, pork, hams, cured beef, etc.; 15,820,006 cwt. of home-grazed beef, 8,701,451 cwt. of home-raised mutton; and 4,348,944 cwt. of home-bred pork; the total consumption of meat (exclusive of poultry, game and other meat not classified with butcher's meat) of the United Kingdom being 33,697,785 cwt. A reduction of 2d p. lb (the lowest estimated amount of overcharge by retail traders to their customers) on this vast quantity of meat would result in a yearly saving to the whole country of £31,451,264 2s. 8d.

As some evidence of the good work which is being accomplished under the authority of the various Acts enumerated in this art., there was seized in Billingsgate Market in the month of August this year, no less than 87 tons of diseased and putrid fish, entirely unfit for human food; but which had been consigned for sale there.

1876.—Prof. Wanklyn read before the Brit. Asso. at its Meeting at Glasgow a paper, *On the Effects of the Mineral Substances in Drinking Water, on the Health of the Community*. He said :

Inasmuch as by the help of subsidence, reservoirs, and wholesale filtration, the water supply of towns may be sufficiently cleansed from organic impurity, the selection of an appropriate water supply now resolves itself into the selection of water unobjectionable from a mineral point of view, and the question, what are the sanitary effects of the small quantities of mineral substances in drinking water meets the chemical adviser whenever he is called on to choose between different sources of supply? At present we are very much in the dark on these questions, and are obliged to fall back on the system of giving the preference to water, the mineral character of which is not in any way unusual, rejecting for town supply water of unusual mineral character. It is time, however, that better ground should be provided; and, with the object of placing the question on a firmer basis, I am endeavouring to get up a kind of register of the chief water supplies, and in course of time hope that peculiarities of bodily constitution may be connected with peculiarities of water supply. At first sight, when first taking up the subject, both the chemist and the physician are inclined to protest against the notion that appreciable effects may follow from the slight mineral differences in waters. But a nearer view of the subject alters that frame of mind completely. The fluid taken daily by an adult man may be roughly set down at about half a gallon, and at that rate the mineral matter imbibed in a fortnight is quite appreciable. On the other hand, the amount of mineral matter in different articles of food is much smaller than might at first sight be imagined. In wheaten flour it is 0.6 p.c., of which the greater part is phosphate of potash. The mineral contents of the drinking water are not by any means overwhelmed by the mineral matter in ordinary dietaries.

ble for the Price of Wheat, and Incidents associated with the same for more than Six Centuries, and Explanatory Notes.

Year.	Price of Wheat	Average of 10 years.	Year.	Price of Wheat	Average of 10 years.
	p. qr. Winchester measure.			p. qr. Winchester measure.	
£ s. d.	£ s. d.		£ s. d.	£ s. d.	
1259	5 9½		1306	3 11½	
1260	4 9		1307	5 6½	
1261	4 3		1308	6 11½	5 2½
1262	6 1		1309	7 9½	
1263	3 11½		1310	7 0½	
1264	4 4		1311	4 5½	
1265	3 3		1312	4 11½	
1266	4 5½		1313	5 6½	
1267	4 5½		1314	8 4½	
1268	5 3½	4 7½	1315	14 10½	
1269	5 0		1316	15 11½	
1270	6 4½		1317	8 3½	
1271	6 10½		1318	4 6½	7 2½
1272	6 4½		1319	5 9½	
1273	5 5½		1320	6 5	
1274	6 9½		1321	11 7½	
1275	5 0½		1322	8 11½	
1276	6 2½		1323	7 5½	
1277	5 1½		1324	7 4½	
1278	4 4½	5 9½	1325	5 8½	
1279	5 1½		1326	3 7½	
1280	4 11½		1327	3 11	
1281	6 0½		1328	6 5½	6 8½
1282	5 11½		1329	6 6½	
1283	6 11½		1330	7 2½	
1284	4 11½		1331	7 11½	
1285	5 4½		1332	4 8½	
1286	4 9		1333	4 2½	
1287	2 10½		1334	4 0½	
1288	3 0½	4 11½	1335	5 3½	
1289	4 3½		1336	4 11	
1290	6 5½		1337	3 7	6 1½
1291	5 7½		1338	3 2½	
1292	5 4½		1339	5 10½	
1293	8 3½		1340	3 6½	
1294	9 1½		1341	3 9½	
1295	6 9		1342	4 1½	
1296	4 9½		1343	5 7½	
1297	5 2½		1344	3 6	
1298	5 2½	6 1½	1345	3 9½	
1299	6 0½		1346	6 10½	
1300	4 9		1347	6 7½	
1301	5 0½		1348	4 2	4 9½
1302	4 11½		1349	5 5½	
1303	4 1½		1350	8 3½	
1304	5 9½		1351	10 2½	
1305	4 10½		1352	7 2½	

1266.—The Assize of Bread was regulated by Stat. of this year.

1270.—The *Chronicon Preciosum* (pub. 1707) states that wheat ranged from £4 16s. to £6 8s. p. qr. this year. We do not find any confirmation.

1286.—Such a storm of rain, thunder and lightning, fell on St. Margaret's night, that wheat came by degrees to the qr. 16s.—*Chronicon Preciosum*.

1287.—This is the lowest price of which we have any record until 1454.

1288.—So great a plenty of corn and scarcity of money that wheat was sold by the qr. at 12. 6d.—*Chronicon Preciosum*.

1294.—Wheat reached 12s. p. qr. this year for the first time on record.

1299.—An Act of the Common Council of Lond. regulating the price of victuals.

1302.—Bakers of Lond. first allowed to sell Bread in their own shops.

1307.—New regulation for Assize of Bread in Lond.—*See Text*.

1314.—The price of flesh and fowl in the City fixed by Act of Parl. Rains at harvest raised the price of corn.

1315.—This was the first year of the Great Famine.

1316.—This was the highest price reached during this century.

1347.—First record of corn being imported into England. There was no legislation against it.

1348.—The Plague. Provisions were sold off at very low prices.

1350-1.—The bushel of wheat was to be taken as of the value of 10d.—25 Edw. III. stat. 2. c. 1.

Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.	Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
1353	4 2½		1403	3 7	
1354	5 3½		1404	2 8	
1355	5 11½		1405	5 4	
1356	6 0		1406	5 2	
1357	6 10½		1407	4 0	
1358	5 6½	6 6	1408	...	
1359	5 11		1409	6 8	
1360	6 3½		1410	...	
1361	5 4½		1411	4 0	
1362	7 6		1412	...	
1363	8 6		1413	...	
1364	7 5½		1414	6 8	
1365	6 0½		1415	7 4	
1366	6 8½		1416	13 0	
1367	8 7½		1417	6 6	
1368	6 7½	6 10½	1418	...	
1369	11 10½		1419	...	
1370	9 4½		1420	...	
1371	6 11½		1421	...	
1372	7 10½		1422	...	
1373	6 2½		1423	8 0	
1374	8 2½		1424	5 10	
1375	7 9½		1425	6 6	
1376	4 9		1426	4 3	
1377	3 8½		1427	4 0	
1378	3 6½	7 0½	1428	4 6	
1379	5 9½		1429	8 4	
1380	6 2½		1430	7 0	
1381	5 7½		1431	6 0	
1382	5 3½		1432	...	
1383	4 10		1433	...	
1384	5 7		1434	1 6 8	
1385	5 0½		1435	5 4	
1386	4 1		1436	6 8	
1387	3 4½		1437	4 6	
1388	3 8½	4 11½	1438	14 10	
1389	5 5½		1439	15 1	
1390	8 9		1440	9 9	
1391	5 5½		1441	4 1	
1392	3 2½		1442	6 8	
1393	3 8½		1443	...	
1394	3 10½		1444	5 0	
1395	5 0		1445	...	
1396	5 11½		1446	6 6	
1397	5 9½		1447	5 3	
1398	5 2½	5 3	1448	5 10	
1399	5 6½		1449	5 2	
1400	7 11½		1450	4 0	
1401	11 0		1451	7 0	
1402	6 0		1452	5 0	
			1453	5 4	

1360.—Exportation of corn forbidden, except to Calais and Gascoin.

1362.—Act regulating the price of poultry.—37 Edw. III. c. 3.

1363.—Servants to eat flesh or fish but once a day.—37 Edw. III. c. 8.

1365.—An Ordin. promulgated in Lond. regarding sale of Horse Bread.

1391.—The measuring of grain to be made uniform throughout the realm.—15 Rich. II. c. 4.

1393.—Export of corn freely permitted.—17 Rich. II. c. 7.

1400.—The prices down to this date are obtained from Prof. Rogers' T. in *Hist. of Agriculture and Prices*, 1866. The average price during the whole period of 140 years was 5s. 10½d. p. qr.

1401.—The prices from this date are those given by Sir Fred. M. Eden (*Hist. of the Poor*). In consequence of the prices for some of the years not being ascertained, we cannot continue the decennial prices for a period.

1418.—The £ 1 of this period represents £1 18s. 0d. of our present money.

1425.—The Stat. of Rich. II. c. 7 was confirmed.

1434.—Great rainfall and floods—wheat very dear.—*Chronicon Preciosum*.

1436.—The Importation and Exportation of corn to be permitted without hindrance.—15 Hen. VI. c. 2. The importation appears to have been free from the Conquest downwards.

Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.	Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1454	2 2		1511	6 8	
1455	4 0		1512	18 8	
1456	5 0		1513	7 4	
1457	6 4		1514	8 8	
1458	4 0	4 9½	1515	6 0	
1459	5 0		1516	8 4	
1460	6 3		1517	...	
1461	4 0		1518	13 0	
1462	5 0		1519	10 3	
1463	3 8		1520	8 0	
1464	6 8		1521	1 3 4	
1465	...		1522	9 4	
1466	5 8		1523	...	
1467	...		1524	13 4	
1468	5 10		1525	10 2	
1469	6 0		1526	...	
1470	...		1527	14 7	
1471	...		1528	18 1	
1472	...		1529	18 0	
1473	...		1530	5 4	
1474	...		1531	...	
1475	...		1532	...	
1476	...		1533	...	
1477	...		1534	7 7	
1478	...		1535	...	
1479	...		1536	...	
1480	8 0		1537	13 4	
1481	6 10		1538	17 4	
1482	...		1539	13 4	
1483	5 5		1540	13 4	
1484	5 4		1541	18 8	
1485	3 10		1542	14 8	
1486	16 4		1543	1 0 0	
1487	4 8		1544	1 5 4	
1488	4 4		1545	18 8	
1489	3 8		1546	...	
1490	...		1547	...	
1491	10 8		1548	6 8	
1492	4 8		1549	...	
1493	4 0		1550	14 1	
1494	4 0		1551	11 0	
1495	3 4		1552	17 6	
1496	4 4		1553	11 7	
1497	1 0 0		1554	11 0	
1498	4 0		1555	9 8	
1499	5 0		1556	1 7 5	
1500	3 4		1557	18 0	
1501	7 0		1558	9 9	
1502	...		1559	12 0	
1503	5 10		1560	1 18 5	
1504	5 10		1561	0 7	
1505	6 8		1562	17 6	
1506	...		1563	17 6	
1507	...		1564	16 0	
1508	...		1565	18 5	
1509	3 8		1566	17 0	
1510	...		1567	15 0	

454.—This appears to be the lowest price on record. See 1287.

403.—The first prohibition against the *Importation* of corn enacted by 3 Edw. IV. c. 2.

550.—Act against Regrattours, Forestallers, and Engrossers. See *Text*.

553.—Mr. Took considers that from this date the intrinsic value of English coinage has substantially remained unchanged.—*Hist. of Prices*, vol. vi. (1857), p. 427.

555.—Export of Corn and victual without license prohibited.—1 & 2 Phil. & Mary, c. 5.

558.—Corn might be *exported* from *Norfolk* and *Suffolk*.—1 Eliz. c. 11.

562.—Corn might be exported by British subjects in Brit. ships.—5 Eliz. c. 5.

Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.	Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.
	£ s. d.	£ s. d.		£ s. d.	£ s. d.
1568	13 4		1616	1 14 11½	
1569	16 0		1617	1 19 8½	
1570	...		1618	1 17 5½	1 15 11
1571	...		1619	1 10 10	
1572	1 0 6		1620	1 6 4½	
1573	1 12 9		1621	1 5 9½	
1574	1 4 0		1622	2 7 1	
1575	1 0 0		1623	2 5 7½	
1576	16 0		1624	1 18 6½	
1577	...		1625	2 1 2	
1578	18 0		1626	1 19 5	
1579	16 3		1627	1 10 6	
1580	1 8 0		1628	1 5 5½	1 15 1
1581	...		1629	1 14 8	
1582	0 18 2		1630	2 6 2½	
1583	0 17 2		1631	2 12 2	
1584	0 15 8½		1632	2 2 4½	
1585	1 1 0½		1633	2 3 10½	
1586	1 12 0		1634	2 5 3	
1587	1 7 10		1635	2 2 1	
1588	0 14 2½		1636	2 3 10	
1589	0 19 6		1637	2 3 3½	
1590	1 3 1		1638	2 7 1½	2 4
1591	1 0 2		1639	1 15 7	
1592	0 16 7		1640	1 16 2	
1593	0 18 4½		1641	2 0 3½	
1594	1 12 0		1642	1 13 9½	
1595	1 18 6		1643	2 0 3½	
1596	2 6 3		1644	1 13 2	
1597	2 16 10½		1645	1 18 7½	
1598	1 17 11	1 10 11	1646	2 2 8	
1599	1 3 8½		1647	3 5 5½	
1600	1 9 0½		1648	3 15 6½	2 4
1601	1 6 8		1649	3 11 1½	
1602	1 4 3½		1650	3 8 1½	
1603	1 6 8		1651	3 5 2½	
1604	1 4 3½		1652	2 4 0	
1605	1 6 10½		1653	1 11 6½	
1606	1 5 5½		1654	1 3 1½	
1607	1 9 0½		1655	1 9 7½	
1608	2 4 5½	1 8 0½	1656	1 18 2½	
1609	2 0 4		1657	2 1 5½	
1610	1 7 3		1658	2 17 9½	2 7
1611	1 10 3		1659	2 18 8	
1612	1 16 9		1660	2 10 2½	
1613	1 19 2½		1661	3 2 2½	
1614	1 19 1½		1662	3 5 9½	
1615	1 14 1½		1663	2 10 8	

1571.—Corn might be exported to *Friendly Countries*.—Export duty of 12d. p. qr. imposed Eliz. c. 13.

1580.—The end of the *Eden* prices.

1582.—From this date down to 1770, the prices are those ascertained by the Audit Books College—reduced to Winchester measure.

1586.—Corn to be stored in London in view of famine, by order of the Lord Mayor.

1593.—Export of corn might be prohibited generally or locally.—35 Eliz. c. 7.

1594.—Dearth occasioned by excessive exportation.

1595.—New regulations as to the Assize of Bread issued in London.

1596.—Dearth occasioned by great rains.

1604.—Exportation of corn permitted when below certain prices named.—1 James I. c. 25.

1608.—Bread very dear in London.

1623.—Exportation of grain allowed, according to scale of prices, and on payment of Cu 21 James I. c. 28.

1610.—A famine expected—see text this date.

1646.—The table of the price of wheat compiled by Bishop Fleetwood begins at this date, as materially from the figures here given. We do not use Fleetwood's table. He took the price for the two halves of each year.

1660.—Importation of grain allowed on payment of certain duties regulated by price.

1661.—By 15 Car. II. c. 7, the high duties on *Exportation* of grain were repealed. Cattle imported from Isle of Man.

Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.	Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.
£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1664	1 16 0		1711	2 8 0	
1665	2 3 10½		1712	2 1 2½	
1666	1 12 0		1713	2 5 4	
1667	1 12 0		1714	2 4 9	
1668	1 15 6½	2 6 8½	1715	1 18 2½	
1669	1 19 5		1716	2 2 8	
1670	1 17 0½		1717	2 0 7½	
1671	1 17 4		1718	1 14 6½	2 7 5½
1672	1 16 5½		1719	1 11 1½	
1673	2 1 5½		1720	1 12 10½	
1674	3 1 0½		1721	1 13 4	
1675	2 17 5½		1722	1 12 0	
1676	1 13 9½		1723	1 10 10½	
1677	1 17 4		1724	1 12 10½	
1678	2 12 5½	2 3 4½	1725	2 3 1½	
1679	2 13 4		1726	2 0 10½	
1680	2 0 0		1727	1 17 4	
1681	2 1 5½		1728	2 8 5½	1 16 3½
1682	1 19 1½		1729	2 1 7½	
1683	1 15 6½		1730	1 12 5½	
1684	1 19 1½		1731	1 9 2½	
1685	2 1 5½		1732	1 3 8½	
1686	1 10 2½		1733	1 5 2½	
1687	1 2 4½		1734	1 14 6½	
1688	2 0 10½	1 18 4½	1735	1 18 2½	
1689	1 6 8		1736	1 15 10½	
1690	1 10 9½		1737	1 13 9½	
1691	1 10 2½		1738	1 11 6½	1 12 7½
1692	2 1 5½		1739	1 14 2½	
1693	3 0 1½		1740	2 5 1½	
1694	2 16 10½		1741	2 1 5½	
1695	2 7 1½		1742	1 10 2½	
1696	3 3 1½		1743	1 2 1	
1697	2 13 4		1744	1 2 1	
1698	3 0 9	2 7 0½	1745	1 4 5½	
1699	2 16 10½		1746	1 14 8	
1700	1 15 6½		1747	1 10 11½	
1701	1 13 5½		1748	1 12 10½	1 11 8½
1702	1 6 2½		1749	1 12 10½	
1703	1 12 0		1750	1 8 10½	
1704	2 1 4		1751	1 14 2½	
1705	1 6 8		1752	1 17 2½	
1706	1 3 1½		1753	1 19 8½	
1707	1 5 4		1754	1 10 9½	
1708	1 16 10½	1 13 9	1755	1 10 1	
1709	3 9 9½		1756	2 0 1½	
1710	3 9 4		1757	2 13 4	

1670.—The measure of grain to be made uniform in all parts of England.—22 Car. II. c. 8. By 22 Car. II. c. 13, the export of corn permitted when higher prices prevailed than those permitted by Act of 1663—but with higher customs duty.

1684.—By 1 James II. c. 19, regulations made for ascertaining price of grain.

1688.—By 1 Wm. & Mary c. 12, all *exportation* duties were abolished, and a *bounty* offered by way of encouragement. This was an entire change of policy.

1698.—The export of grain and breadstuffs prohibited for 1 year. Bounty suspended for 1 year.

1700.—All customs and duties on export of grain abolished by 11 & 12 Wm. III. c. 20.

1703.—By Act of the Parliament of *Scotland*, all importation of grain from *Ireland* was prohibited.

1709.—By 8 Anne, c. 2, all export of grain and spirit produced from grain prohibited; but might be renewed on Proclamation. This year another Act was passed to regulate the Assize of Bread.

1729.—By 2 Geo. II. c. 18, powers were given to Justices of Peace to ascertain price of grain.

1732.—Further powers given for ascertaining price of English grain.

1738.—By 11 Geo. II. c. 22, powers were given to punish persons interfering to prevent export of grain. The "Hundred" made liable for grain destroyed.

1741.—Importation of grain from *Ireland* and elsewhere into *Scotland* permitted.

1750.—The wheat exported this year amounted to 947,000 qrs., and the total bounties paid during the 20 years from 1740 to 1751 reached the sum of £1,575,000.—*McCulloch*.

1751.—An Act for ascertaining quantities of grain exported for which bounty was payable.

1753.—The Exchequer bankrupt and unable to pay the bounties on exportation of grain otherwise than by debentures.

1757.—Act to regulate making bread, and holding assize thereof.

Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.	Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.
1758	£ s. d. 2 4 5½	£ s. d. 1 17 2	1791	£ s. d. 2 8 7	
1759	1 15 3		1792	2 3 0	
1760	1 12 5½		1793	2 19 3	
1761	1 6 9½		1794	2 12 3	
1762	1 14 8		1795	3 15 2	
1763	1 16 1½		1796	3 18 7	
1764	2 1 5½		1797	2 13 9	
1765	2 8 0		1798	2 11 10	2 16 0
1766	2 3 1½		1799	3 9 0	
1767	2 17 4		1800	5 13 10	
1768	2 13 9½	2 0 10½	1801	5 19 6	
1769	2 0 7		1802	3 9 10	
1770	2 3 6½		1803	2 18 10	
1771	2 8 7		1804	3 2 3	
1772	2 12 3		1805	4 9 9	
1773	2 12 7		1806	3 19 1	
1774	2 14 3		1807	3 15 4	
1775	2 9 10		1808	4 1 4	4 1 10½
1776	1 19 4		1809	4 17 4	
1777	2 6 11		1810	5 6 5	
1778	2 3 3	2 7 1½	1811	4 15 3	
1779	1 14 8		1812	6 6 2	
1780	1 16 9		1813	5 9 9	
1781	1 6 0		1814	3 14 4	
1782	2 9 3		1815	3 5 7	
1783	2 14 3		1816	3 18 6	
1784	2 10 4		1817	4 16 11	
1785	2 3 1		1818	4 6 3	4 13 8
1786	2 0 0		1819	3 14 6	
1787	2 2 5½		1820	3 7 10	
1788	2 6 4	2 4 3½	1821	2 16 1	
1789	2 12 9		1822	2 4 7	
1790	2 14 9		1823	2 13 4	

1760.—Mr. Comber estimated the average ann. produce of wheat at this date in Gt. Brit. at 3,800,000 qrs., of which, about 3,500,000 were required for home consumption, and 300,000 qrs. were left for export.

1762.—New Act, 3 Geo. III. c. 11, as to Assize of Bread.

1765.—First trustworthy estimate of national consumption of grain made. See *Text*.

1767.—Sir James Steuart's famous work on Political Economy pub.

1770.—Act for regis. prices of corn.

1771.—From this date we quote from *Willich's* ann. average, prices p. imperial qr. These differ materially from the Eton prices.

1773.—The produce of wheat in Gt. Brit. was stated in the House of Commons to be 4,000,000 qrs., of which the whole and above 100,000 imported qrs. were consumed.

By 13 Geo. III. c. 70, all importation was stopped when price of wheat was 44s. p. qr. Prices also fixed as to other grain. New Act as to Assize and making of Bread.

1781.—Further Act, 21 Geo. III. c. 50, for ascertaining price of grain.

1789.—Further Act as to ascertaining price of grain.

1791.—New Act, 31 Geo. III. c. 30, for regulating importation and exportation of grain.

1792.—From this date inclusive the account of Eton College has been kept according to the bushel of 8 gallons, under the provisions of 31 Geo. III. c. 30, s. 82.

1796.—The consumption was stated by Lord Hawkesbury to be 500,000 qrs. p. month, or 6,000,000 qrs. p. a., of which 180,000 were imported. The value of imported grain this year was £4,360,000.

1797.—New Act for Assize and making of Bread in London.

1800.—The average growth of grain in Gt. Brit. was estimated by Chalmers to be 30,549,516 qrs. A grain-dealer was this year convicted of "engrossing" supplies, which remains an offence under the common law.

1801.—The value of imported grain this year reached £11,600,000.

1804.—Foreign grain to be admitted at 6d. p. qr. when English wheat was 66s. and upwards.—44 Geo. III. c. 109.

1806.—Free import of grain from *Ireland* permitted.

1808.—Exports exceeded imports in consequence of supplies sent to Brit. armies in Spain and Portugal.

1810.—Large importations of grain from France, notwithstanding that we were at war with her. Estimated value of all grain imported £7,800,000.

1814.—According to Colquhoun, the consumption of corn in *Gt. Brit.* and *Ireland* this year amounted to about 35,000,000 qrs. Value of imported grain £2,815,319.

1815.—No foreign corn to be admitted until English wheat was 80s. or more p. qr. Colonial admitted when price reached 67s.—55 Geo. III. c. 26.

1818.—Value of grain imports £7,908,140.

1821.—New Act, 1 & 2 Geo. IV. c. 87, for importation and exportation of grain.

1822.—Corn Law Amendment Act, admitting foreign wheat at 12s. p. qr. duty when price was 70s., and 1s. duty when it was 80s. and upwards. New Act to regulate making and sale of bread in Lond.

Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.	Year.	Price of Wheat p. qr. Winchester measure.	Average of 10 years.
1824	£ s. d. 3 3 11		1851	£ s. d. 1 18 6	
1825	3 8 6		1852	2 0 9	
1826	2 18 8		1853	2 13 3	
1827	2 18 6		1854	3 12 5	
1828	3 0 5	3 0 9	1855	3 14 8	
1829	3 6 3		1856	3 9 2	
1830	3 4 3		1857	2 16 4	
1831	3 6 4		1858	2 4 2	2 11 4½
1832	2 18 8		1859	2 3 9	
1833	2 12 11		1860	2 13 3	
1834	2 6 2		1861	2 15 4	
1835	1 19 4		1862	2 15 5	
1836	2 8 6		1863	2 4 9	
1837	2 15 10		1864	2 0 2	
1838	3 4 7	2 16 4½	1865	2 1 0	
1839	3 10 8		1866	2 9 11	
1840	3 6 4		1867	3 4 5	
1841	3 4 4		1868	3 4 0	2 11 2
1842	2 17 3		1869	2 8 3	
1843	2 10 1		1870	2 6 9	
1844	2 11 3		1871	2 16 8	
1845	2 10 10		1872	2 17 0	
1846	2 14 8		1873	2 18 8	
1847	3 19 9		1874	2 15 9	
1848	2 10 6	2 19 7	1875	2 5 2	
1849	2 4 3		1876	2 6 2	
1850	2 0 3				

1825.—American colonial wheat admitted at a permanent duty of 5s. p. pr. Duty of £25 p. qr. on buckwheat.

1826.—Foreign grain admitted at nominal duty—temporary.—7 & 8 Geo. IV. c. 3.

1827.—Sliding Scale first attempted as to importation of grain.

1828.—Corn Law Amendment Act, Sliding Scale adopted.

1835.—Act to regulate the importation of grain into Isle of Man.

1836.—New Act as to making and sale of bread in Lond.; first modern measure against adulteration. 6 & 7 Wm. IV. c. 37.

1838.—Act as to making and sale of bread in Ireland.

1842.—Corn Law Amendment Act—5 & 6 Vict. c. 14. "Reduced Sliding Scale."

1846.—Repeal of Corn Laws. Duty of 1s. p. qr. continued until 1869.

1847.—The potato failure in Ireland and parts of Gt. Brit.

1851.—The *Lancet* "Analytical Commission" appointed.

1855.—Reports of *Lancet* Commission pub.

1860.—A general Act for preventing Adulteration of Food and Drinks—23 & 24 Vict. c. 84.

1861.—Value of imported grain £34,918,639.

1862.—"Cotton Famine." Value of imported grain £37,772,194.

1863.—Act for regulation of bakehouses, and another Act for seizure of diseased and unwholesome meat. Value of imported grain £25,955,939.

1864.—Privy Council Rep. as to diseased meat.

1866.—Prof. Rogers' *Hist. of Agriculture and Prices* pub.—Mr. Charles Willich pub. T. showing (*inter alia*) the price of Consols, the Bank rate of Discount, and the price of Wheat from July, 1844 (passing of Bank Charter Act), to May, 1866.

1868.—Act to regulate sale of poisons.

1869.—Last trace of Corn Laws abolished from the Stat. Book by repeal of the 1s. duty left in 1846—32 Vict. c. 14. Adulteration Acts extended to seeds.

1872.—Amendment and extension of law regarding Adulteration of Food—35 & 36 Vict. c. 74.

1875.—The imports of grain into the U.K. in the year ending 31 Aug. reached 25,001,590 qrs.

Note.—By Winchester measure in this Table is meant a quarter of 8 bushels of 8 gallons each.

The authorities upon which the preceding T. is based are indicated in the historical footnotes accompanying the T.

[BIRTH-RATE.] [CATTLE DISEASES.] [CHEMISTS AND DRUGGISTS.] [DEATH-RATES.] [DESTITUTION.] [ERGOTISM.] [FAMINES.] [FASTING.] [FECUNDITY.] [HEALTH.] [LIFE, HUMAN.] [MARRIAGES.] [OCCUPATIONS.] [POPULATION.] [SCORBUTIC DISEASES.] [SICKNESS.] [STARVATION, DEATHS FROM.]

FOORD, J. B., was Joint Sec. in Lond. for *Scottish Amicable* for several years—1844–6.

FOOTE, GEORGE F., M.D., delivered before the Batavia Lyceum, *An Address upon the Subject of Life Ins.*, which was afterwards printed and widely circulated by the *New York Life*, in 1858.

FOR WHOM IT MAY CONCERN.—This phrase is a technical one. It is often used in pol. of marine ins., and has been—perhaps is still—used in fire pol. occasionally in the U.S. The words usually follow the name of the insured inserted in the pol., and are intended to protect the interests of other persons who may be interested in the venture, but whose

names are not known to the agent effecting the ins. Mr. Willard Phillips, in his *Treatise on the Law of Marine Ins.* (3rd ed. vol. i. p. 214), says: "Such a pol. supposes an agency; and proceeding on that ground, looks only to the principal on whose behalf or on whose account the agent moves in the transaction; and he for whose benefit the ins. is procured is the person in the contemplation of the parties—is he whom alone it concerns." It was necessary that some such limitation as this should be adopted, or fraud would result. There are many cases in the books supporting this view. [INTENTION.]

Occasionally such words have been inserted in fire pol. By means of these the risk may take a wider scope than is contemplated by the underwriter. We are disposed to follow the terse dictum of Mr. C. C. Hine in his *Fire Ins. Instructions*, 1870: "Do not insert this term in F. pol. You cannot afford to insure a half dozen parties for one prem., and—unlike marine—the property and parties are so situated that each can be protected by separate ins.—or if they cannot be, that is their misfortune, not yours." [INSURABLE INTEREST.]

FORAMITI, SIGNOR F., pub. in Venezia, 1843: *Manuale Teorico-Pratico delle Assicurazioni Marittime, ad uso degli Assicuratori e degli Assicurati*. [MARINE INS., HIST. OF.]

FORBES, DR.—In 1834 and 1836 he pub. in the *Trans. of the Provincial Medical and Surgical Asso.* several papers under the following title: *Sketch of the Medical Topography of the Hundred of Penwith, comprising the District of Land's End in Cornwall*. We notice the contents under MORT. ORS.

FORBIDDEN PORTS.—It is very customary in marine ins. "time pol." to specify that the vessel is not to sail to or touch at certain specified places as: "Warranted not to use ports or places in Texas, except Galveston; nor ports or places in the Gulf of Mexico." There may be many reasons for stipulating such a warranty, as warfare, liability to hurricanes, or other local dangers. Any breach of this warranty releases the underwriter from liability; and this even though the vessel shall have touched at a forbidden port and left in safety, reaching her ordinary course before any disaster occurred. [WARRANTIES.]

FORBORNE ANNUITY.—An annu. forborne is usually understood as an annu. payable on the failure of a given life, or lives. But technically an annu. surrendered for a specific period in view of being augmented at its termination is an annu. forborne. The late Mr. Peter Hardy read before the Inst. of Act. in 1857 a paper: *An Investigation into the proper Method of Determining the Amount of an Annu. forborne and improved at Interest, during the Existence of a given Life* (*Assu. Mag.* vol. vii. p. 1), wherein he cites those who had previously treated of the problem; and deals with the question on a scientific basis.

FORCE OF DISCOUNT.—A term given by Mr. Woolhouse to "instantaneous interest of money;" which, together with "instantaneous mort.," forms the basis of his Theory of Continuous Annuities and Assurances, of which we shall give an account under title of LIFE CONTINGENCIES.

For examples of the "force of discount" at different rates of int., see *Assu. Mag.* vol. xi. p. 324; and again, vol. xv. p. 125. [FORCE OF MORT.]

FORCE OF DISEASE.—Hippocrates, in his book of *Prognostics*, analyzed all the signs by which a right prognosis of any particular disease could be formed, and their accumulated weight he designated the "Force of Disease." [NOSOMETRY.] See a modern view of the subject in *Assu. Mag.* vol. xiii. p. 336, designated "partial force of mort." [FORCE OF MORT.] [MORT., LAW OF.]

FORCE MAJEURE.—This is a term much used in ins. and other contracts made on the Continent of Europe. It implies something done or not done by the operation of a superior force impelling or preventing it. It is more generally used in regard to things not done; and is pleaded in equitable relief of contracts for specific performance, etc. The thing contracted was not done by reason of some physical disability preventing the doing thereof. The non-payment of ins. prems., during a state of warfare with consequent blockade, would appear to come within this designation; but here there should be at least some proof of an intention to pay, expressed at the time of their falling due. [WARFARE.]

The German fire ins. pol. directly recognizes this principle in its conditions. Thus, after defining the dates at which returns are to be made to the office by way of proof of loss, it continues: "The periods of time above mentioned, in case of physical disability, shall commence from the date of cessation of such disability." [FIRE INS. POL., Germany, art. x.]

FORCE OF MORTALITY.—This is an expression which has naturally arisen out of the development of the theory of the lessening or destruction of the vital powers, in a constant geometric ratio, say from 12 years of age to the end of life. From birth to 12 years, or thereabouts, the force is running the other way—the life is gaining vitality. The force may be *partial* as to the effect of particular or specific diseases; but is total in its actual operation. These points will be further spoken of as we proceed.

1825.—It was unquestionably Mr. Gompertz, who, in his paper on the *Law of Human Mort.*, read before the Royal So. this year, propounded the theory spoken of; but he did not use the technical expression under which we now write. We do not

think it has been, or can be, claimed that DE MOIVRE'S HYPOTHESIS led up to the same idea.

1832.—It was Mr. T. R. Edmonds, who, in his *Life Tables*, pub. this year, first used the expression "Force of Mort." to denote the relation of dying to living at any definite age—remarking, "The force of mort. at any age is measured by the number of deaths in a given time out of a given number constantly living" (p. xvi). But he also said, "It would evidently be improper to use the term to express the relation of dying to living in yearly intervals of age: for the force of mort. at the beginning, at the middle, and at the end of any year of age, are all different" (p. v). He gave the logarithms for showing at every age of life the "prob. of living one year," which is the converse of the force of mort. [INTENSITY OF LIFE.]

1845.—Mr. Neison, sen., pub. his corrected *English Life T.* (in *Contributions to V. Statistics*), and in this T. was embodied the two functions of "mort. p.c." at each age, and "specific intensity" also at each age. [INTENSITY OF LIFE.]

1853.—In the *English Life T.* No. 2, pub. this year, the function of the "ann. mort. p.c. at each age" was introduced—we believe for the first time. It was shown for male and female lives separately. There were also shown the "males and females living at each age to 1 death ann.," and "the living of any given age and upwards to 1 death ann."

1854.—Mr. Jellicoe, in a paper read before the Inst. of Act. this year, *On the Rates of Mort. prevailing amongst the Male and Female Lives assured in the Eagle Ins. Co. during the 44 Years ending 31 Dec. 1851* (*Assu. Mag.* vol. iv. p. 199), says:

Since, then, these curves of mort. which obtain naturally do not appear to be traceable throughout upon any hypothetical principle, we must be content to derive them from the rude elements themselves, by such means as will most truly interpret their nature and character—that is to say, we can only, as it seems, measure the force of mort. by the rate of it; and for this last we must always be dependent on the quality of the data before us. Now the rate of mort. is measured by the ratio of the numbers dying to the numbers living during a given interval; and if we examine any T. . . . exhibiting these ratios, it becomes obvious that a certain progression exists amongst them, increasing generally as the age increases, notwithstanding the irregularity of those in immediate juxtaposition. We may then fairly presume that this progression has some relation with the age; and what we have to discover is the exact nature of this relation.

He then proceeds to this investigation, employing Gompertz's formula in the process. In the *Eagle Experience T.* pub. this year there was introduced the function of the "mort. p.c. p.a."

1863.—Mr. W. S. B. Woolhouse read before the Inst. of Act. a paper: *On Interpolation, Summation, and the Adjustment of Numerical Tables* [*Assu. Mag.* vol. xi. pp. 61 and 301], wherein he not only greatly improved upon the processes before in use, but especially adapted his formulæ to the enumeration of the principle of the geometric advancement of the forces of mort. He finally propounds the theorem: "The force of mort. of joint existence is equal to the sum of the forces of mort. of the constituent lives;" and gives the formulæ for incorp. the function at each age into Mort. T., furnishing as examples, the *Experience T.* No. 1, Davies' *Equitable T.*, and Milne's *Carlisle T.* The "force of discount" at several rates of int. is also shown. (See 1869.)

1864.—The *English Life T.* No. 3, pub. this year, introduced several new functions in regard to the Force of Mort. See *ENGLISH LIFE T.* No. 3. [POP.]

1867.—Mr. W. M. Makeham read before the Inst. of Act. a paper: *On the Law of Mort.* [*Assu. Mag.* vol. xiii. p. 325], wherein he says:

In the following pages I shall have frequent occasion to avail myself of a term which the progress of the analysis of life contingencies has rendered indispensable, but which is not found in any of the standard elementary works in that science. I think, therefore, that I cannot better commence this paper than by an attempt to give an explanation of the expression "force of mort.," sufficiently ample to obviate any difficulties which might otherwise be experienced on this score.

He then enters upon his elucidation, and after advancing through the first stage, in reviewing the results, says:

My object, however, in calling attention to a phenomenon which must be sufficiently familiar to all who have given the least consideration to the subject, is to show how extremely inadequate the average ann. number of deaths—taken for several years together—becomes as a measure of the actual intensity or force of the operating causes by which the decrements of life are produced.

He then advances a further stage, and after disposing of certain other preliminary points, says:

The considerations to which I have thus ventured to call attention afford, I think, a sufficient explanation of the nature of the function known as the "force of mort.," as well as of the reason for its designation; and at the same time convey some idea of the importance which such a function is calculated to possess in the investigation of the nature of the law of mort., and the analysis of life contingencies generally.

He finally states his proposition in its entirety:

Our opening remarks will have made it sufficiently apparent that the force of mort. expresses the rapidity with which, at any given instant of time, a body of individuals of a given age are diminishing by death. Being a function of the age, it is incessantly varying in passing from one age to the next; but it may be accurately defined as the ratio between the number living at the given age and the number of deaths which would take place in one year, supposing the force of mort. to remain constant during that period, and each vacancy arising by death to be filled up as it occurs by the substitution of a life of the same age. When speaking of the general mort., irrespective of the particular causes, it may be designated as the "total" force of mort., to distinguish it from the "partial" forces, by which latter term I propose to designate the ratio above defined, when we are considering the deaths arising from one or more particular diseases only. . . .

On this latter point he afterwards says :

The modification which I have suggested, viz. there are certain *partial forces of mort.* (how many I do not pretend to say) which increase in intensity with the age in a constant geometric ratio, while there are also certain other partial forces which do not so increase, may be tested by an examination of the 6 columns which follow that of the *total* force above referred to. [We shall give this T. here referred to under MORT., LAW OF.] The tendency to a geometrical progression is more or less apparent in all of them; the average rate of increase being such that the force of mort. somewhat more than doubles itself in 10 years.

1869.—Mr. Woolhouse returned to this subject (see 1863) in a paper read before the Inst. of Act. : *On an Improved Theory of Annuities and Assurances* [*Assu. Mag.* vol. xv. p. 95], and gives demonstrations and formulæ sufficient to estab. the practical utility and logical consistency of what he there aptly terms the "continuous method" of dealing with annu. and ins., and the general power and efficiency of the leading principles of the new theory as an instrument of investigation; adding, "There is, indeed, good ground to expect that the adoption of the method here presented will lead to more extended researches and a higher range of inquiry in this most important and interesting subject."

In the preface to *Experience* T. No. 2. [Inst. of Act. Mort. T.], pub. this year, occurs the following (p. 20) :

It must be noticed that the ann. mort. p. c. is not what is now generally called the "force of mort.;" but the number out of 100 entering upon a year of age who die in the year, which, when we are dealing only with mort., is the usual form in which the T. finally appear, as deduced from the prob. of dying in a year at each age.

These T. developed the functions : "prob. of surviving a year," and "prob. of dying in a year," the one being the converse of the other; and the latter showing the force of mort. at each age from 10 to end of life.

We now propose to give the results of the Force of Mort., as deduced from several of the best known Mort. T., by Mr. Woolhouse. The cols. relating to the *Carlisle*, *Davies' Equitable*, and the *Experience* T. No. 1, were appended to his paper of 1864; and that for the *Northampton* T. to his paper of 1869; each noticed in this art. Any irregularities of progression must be attributed to imperfect adjustment of the orig. T.

Age.	North- ampton Table.	Carlisle T.	Davies' Equitable Table.	Experience Table No. 1.	Age.	North- ampton Table.	Carlisle T.	Davies' Equitable Table.	Experience Table No. 1.
10	'00987	'0048	'0039	'00678	51	'02936	'0139	'0189	'01655
11	'00907	'0047	'0039	'00680	52	'03044	'0149	'0204	'01757
12	'00897	'0049	'0041	'00682	53	'03139	'0158	'0210	'01868
13	'00905	'0051	'0043	'00685	54	'03241	'0167	'0230	'01989
14	'00914	'0054	'0045	'00690	55	'03350	'0176	'0238	'02120
15	'00922	'0059	'0048	'00695	56	'03466	'0186	'0250	'02261
16	'00938	'0065	'0052	'00700	57	'03590	'0201	'0262	'02418
17	'01043	'0060	'0056	'00706	58	'03724	'0228	'0276	'02585
18	'01150	'0070	'0060	'00712	59	'03868	'0265	'0290	'02767
19	'01250	'0070	'0064	'00719	60	'04024	'0313	'0302	'02970
20	'01354	'0071	'0066	'00727	61	'04192	'0352	'0311	'03195
21	'01453	'0070	'0067	'00736	62	'04349	'0373	'0325	'03442
22	'01505	'0070	'0069	'00745	63	'04518	'0386	'0344	'03712
23	'01527	'0070	'0072	'00754	64	'04702	'0398	'0363	'04008
24	'01551	'0071	'0074	'00764	65	'04902	'0413	'0384	'04332
25	'01576	'0072	'0077	'00779	66	'05155	'0427	'0408	'04686
26	'01601	'0074	'0079	'00786	67	'05435	'0444	'0434	'05073
27	'01627	'0076	'0084	'00798	68	'05747	'0464	'0463	'05495
28	'01654	'0081	'0088	'00810	69	'06098	'0489	'0494	'05950
29	'01682	'0093	'0093	'00824	70	'06494	'0516	'0525	'06443
30	'01710	'0100	'0096	'00838	71	'06944	'0567	'0560	'06980
31	'01740	'0102	'0099	'00854	72	'07463	'0653	'0598	'07561
32	'01771	'0102	'0104	'00870	73	'08065	'0756	'0642	'08195
33	'01803	'0101	'0107	'00887	74	'08772	'0874	'0693	'08882
34	'01836	'0102	'0108	'00905	75	'09615	'0973	'0738	'09631
35	'01870	'0103	'0112	'00923	76	'10439	'1043	'0789	'10442
36	'01906	'0105	'0115	'00943	77	'11111	'1111	'0840	'11326
37	'01943	'0108	'0118	'00963	78	'11711	'1146	'0918	'12295
38	'01982	'0111	'0122	'00984	79	'12453	'1203	'1011	'13350
39	'02022	'0116	'0124	'01007	80	'13640	'1280	'1125	'14496
40	'02077	'0125	'0125	'01030	81	'15148	'1362	'1256	'15739
41	'02149	'0135	'0127	'01054	82	'16908	'1476	'1408	'17083
42	'02226	'0142	'0128	'01081	83	'19377	'1573	'1589	'18546
43	'02291	'0146	'0132	'01113	84	'22009	'1682	'1790	'20157
44	'02345	'0148	'0139	'01154	85	'23925	'1820	'2000	'21958
45	'02401	'0149	'0143	'01202	86	'25862	'2030	'2238	'24025
46	'02461	'0149	'0145	'01260	87	'27928	'2280	'2448	'26419
47	'02523	'0148	'0150	'01326	88	'29518	'2478	'2613	'29247
48	'02588	'0144	'0157	'01398	89	'29839	'2486	'2706	'32672
49	'02674	'0139	'0165	'01476	90	'30435	'2676	'2769	'36847
50	'02800	'0136	'0176	'01562					

1870.—Mr. Woolhouse read before the Inst. of Act. a paper : *Explanation of a New Method of Adjusting Mort. T. ; with some Obs. upon Mr. Makeham's Modification of Gompertz's Theory* [*Assu. Mag.* vol. xv. p. 389], wherein he remarks :

The force of mort., according to Mr. Makeham's formula, is therefore made up of two constituent portions, or partial forces : of which one is constant for all ages, and the other increases from year to

year in a geometrical progression. This combination in the force of mort. is much in accordance with Mr. Gompertz's admirable philosophical reasoning upon the subject. *It would indeed appear that Mr. Gompertz had, on his first discovery and subsequent investigation of the general principles of the law, definitively contemplated the existence of such conditions.* Perhaps no better explanation of the specific rationale of Mr. Makeham's formula could be given than Mr. Gompertz's lucid and satisfactory statement, in the paper referred to [that of 1825], that "it is possible that death may be the consequence of two generally co-existing causes: the one, chance, without previous disposition to death or deterioration; the other a deterioration, or an increased inability to withstand destruction."

He refers to the formulæ of Mr. Sprague, showing the applicability of this function to the determination of the values of joint annuities.

We may here add that Mr. Sprague, without directly treating of this point, has in several of his papers in the *Assn. Mag.* materially aided in rendering the function applicable to the practice of Life Contingencies.

[FORCE OF DISCOUNT.] [GEOMETRICAL PROGRESSION.] [INTENSITY OF LIFE.] [LIFE CONTINGENCIES.] [MORT., LAW OF.] [MORT. PER CENT.] [MORT. T., CONSTRUCTION OF.]

FORCE OF THE WIND.—See WIND.

FORCES.—The military and naval services of the country.

FORCIBLE PLUNDERINGS BY PRIVATEERS OR PIRATES.—One of the risks ins. against in the marine ins. pol. issued under the authority of the Hamburg Ins. Ordin. 1731.

FORD, CHARLES BELL, was Acting Man. of the *Sun Fire* from 1814 to 1856. He was also Deputy-Chairman from 1845 to 1860. He was mainly instrumental in the estab. of the Lond. Fire Engine Estab. in 1833 [FIRE BRIGADES]; and he was Chairman of the Tariff Committee of the Associated Fire Offices. Mr. Ford was also Treasurer and Sec. of the Corp. "for working Mines, Minerals, and Metals, in Scotland," formerly carried on by and for the *Sun Fire*. He died 1860, aged 76.

FORD, WM. BARTON, late Man. of *European* No. 1.—In 1836 he was Accountant in the *York and London* Ins. Co. at York, and subsequently in Lond. He afterwards held the position of Accountant in the *Atlas*; and in 1844 he was appointed Manager of the *European*, remaining in that position until its amalg., when he retired on a pension.

FORE AND AFT.—Implies lying in the direction of the head and the stern; also the whole of the vessel generally. Fore and aft sails are the gibs, drivers, and staysails.

FORECLOSURE.—In Law, the proceeding of a mortgagee to compel the mortgagor to elect whether to redeem the pledge, or to submit to the extinguishment of his right in the property, styled his *Equity of Redemption*. The stat. 15 & 16 Vict. c. 86 (1852) now enables a Court of Equity in certain cases to direct a sale instead of a foreclosure.

But questions of Foreclosure arise which directly affect contracts of ins. Some of these we proceed to notice.

Fire Pol.—Where a fire ins. pol. contains a condition such as the following: "If the title of any property insured shall be changed by sale, mortgage, or otherwise, this pol. shall thereupon be void," as is generally the case in the U.S., such pol. will become void on a foreclosure. The mortgage itself is not regarded as working any change of title: it is only an incomplete step in that direction. The act of foreclosure does change the title. Thus it has been held that where the ins. co. had given assent for the assignment of the pol. by mortgage to the mortgagee, the assignment of his equity of redemption still voided the pol. [*Hazard v. Franklin Mut. F.*, 7 R. L. 429; *Hoxie v. Providence Mut. F.*, 6 R. L. 517.] Where the ins. is effected by the mortgagee to protect his interest, his subsequently acquiring the equity of redemption by foreclosure or otherwise does not invalidate the pol. There are other cases in the American Reports, raising other issues; but as these are merely technical, we do not pursue them. See *Flanders' Law of Fire Ins.* 1871, title "Alienation." See also *May's Law of Ins.* 1873, p. 294. How far a foreclosure comes within the scope of condition 4 of the Brit. Tariff Fire Offices pol. [FIRE INS., CONDITIONS OF, 1870] may be open to question. In all cases of foreclosure notice should be given to the office, and the pol. properly indorsed, or a new pol. taken out. [ALIENATION.]

Life Pol.—In the case of *Parker v. Marquis of Anglesea*, before the British Courts in 1871, A. and B. were jointly interested in a pol. of life ins., and had agreed to keep it up for their mutual benefit, paying the prem. in certain proportions. B. ceased to pay his portion of the prem., and the whole was thereafter paid by A. It was held,—that A. was entitled to a foreclosure decree against B. This was as between the parties, for the pol. had not then become a claim.

FOREIGN ADJUSTMENT OF GENERAL AVERAGE.—This is a technical question not unfrequently arising under marine ins. pol. It is considered uncertain whether the underwriter is liable to pay gen. average according to a foreign statement, without a special clause, which is now therefore very frequently inserted in the pol., viz. "Gen. average payable according to foreign statement if so made up."

Many of the early Ins. Ordin., as that of *Florence*, 1523, and some of later date, required all settlements to be made in conformity with their provisions, where the ins. had been made under their authority. But it is doubtful if they could uphold this requirement.

1755.—Magens thus states the practice at this date: Damages which occur in foreign parts, and are adjusted there, ought in general to be settled here, according to such adjustments, though the regulations which were followed should be contrary to our laws,

But the insurers in England are not obliged to approve of all adjustments made in other countries, nor to comply implicitly with foreign customs, when their unreasonableness can be demonstrated.—Vol. i. p. 5.

1816.—In *Power v. Whitmore*, before the Brit. Courts this year, it was *held*, that an insurer of goods in a foreign country is not liable to indemnify the insured (a subject of that country) who is obliged by the decree of a Court there to pay contribution to a general average, which by the law of this country would not have been demanded, where it does not appear that the parties contracted upon the footing of some usage among merchants obtaining in a foreign country to treat the same as general average; but such usage is not to be collected merely from the recitals and assumption made in the decree. In other words, there must be some direct evidence upon the point. (4 M. & S. 141.)

1868.—In *Fletcher v. Alexander* re the "Savoir Faire," before the Brit. Court of Common Pleas this year, it was *held*, that the port where the voyage terminates, either by completion, or by being broken up, is unquestionably the proper place for the adjustment of a general average.

1869.—In *Dent v. Marine Ins. Co.*, in the Queen's Bench this year, the insurers of a shipment of gold were held liable to pay salvage charges imposed by a Russian tribunal, though adjusted contrary to English practice.

In the U.S. similar decisions have been given, which indicate the course of practice.

[GENERAL AVERAGE.]

FOREIGN ATTACHMENT.—See ATTACHMENT; GARNISHMENT.

FOREIGN CITIES, DEATH-RATE OF.—The Reg.-Gen. in his returns gives us the Death-rate for "Foreign Cities," contrasted with London. This is valuable for many reasons: especially by way of comparison; and, in seasons of epidemics, of warning. During 1874 the death-rates were as follows:

Cities.	Estimated Pop.	Deaths p. 1000	Cities.	Estimated Pop.	Deaths p. 1000
Berlin	128,000	32'03	Baltimore	350,000	21'14
Vienna	644,306	31'08	London	3,311,298	21'04
Bombay	646,636	29'02	Paris	1,851,792	21'01
New York	1,040,000	27'61	Chicago	395,000	20'31
Calcutta	447,600	25'00	Philadelphia	775,000	19'54
Brooklyn	450,000	24'46	St. Louis	400,000	16'27
Boston	331,000	23'60			

A larger T. has been compiled, we believe in the U.S., which we reconstruct, arranging the cities in the order of their mort., beginning with the lowest rate:

Cities.	Year ending	Estimated Pop.	Deaths.	Mort. p. 1000 Pop.	Cities.	Year Ending	Estimated Pop.	Deaths.	Mort. p. 1000 Pop.
1 Oaklands (Cal.)	1875	25,000	388	13'52	21 District of Columbia.	1875	160,000	4352	27'30
2 Dayton (Ohio)	1875	36,000	479	14'22	22 Berlin . . .	1873	950,000	26424	27'81
3 St. Louis . . .	1874	450,000	6506	14'45	23 Manchester . . .	1873	354,000	10015	28'30
4 Milwaukee . . .	1875	100,781	1479	14'76	24 Palermo . . .	1873	223,424	6259	28'46
5 Detroit . . .	1876	115,000	1837	15'97	25 New York . . .	1875	1,057,680	30709	29'03
6 San Francisco .	1875	230,132	4163	18'01	26 Brussels . . .	1873	185,000	5377	29'06
7 Cleveland (Ohio)	1875	162,000	2962	18'20	27 Stockholm . . .	1873	147,249	4484	30'45
8 Chicago . . .	1875	420,000	7899	18'80	28 Milan . . .	1873	77,188	2362	30'00
9 Frankfort on Main . . .	1873	100,000	2088	20'08	29 Mexico . . .	1873	225,000	6063	30'90
10 Boston (U.S.) .	1874	375,000	7812	20'83	30 New Orleans .	1874	207,500	6798	32'73
11 Cincinnati . . .	1875	265,000	5404	20'89	31 Rome . . .	1873	248,307	8479	34'14
12 Philadelphia . .	1875	800,332	17805	22'24	32 Dresden . . .	1873	179,678	6257	34'84
13 London . . .	1873	3,356,073	76624	22'83	33 Nice . . .	1873	49,280	1718	34'89
14 Quebec . . .	1873	62,000	1424	22'92	34 Vienna . . .	1873	700,000	24701	35'28
15 Brooklyn . . .	1875	500,000	11930	23'86	35 Venice . . .	1873	135,644	4919	36'26
16 Pittsburg . . .	1874	137,000	3381	24'68	36 Havana . . .	1873	205,676	7755	37'70
17 Zurich . . .	1873	56,695	1451	25'50	37 Munich . . .	1873	169,400	7705	45'48
18 Calcutta . . .	1873	417,600	11557	25'82	38 Valparaiso . .	1873	95,000	6134	64'59
19 Leipzig . . .	1873	110,000	2869	26'08	39 Vera Cruz . .	1873	15,500	1093	70'51
20 Bordeaux . . .	1873	194,055	5190	26'74	40 Honolulu . . .	1873	14,852	1639	110'35

It is to be regretted that returns could not be obtained for the same years in all cases; but this is generally found impossible over a large number of cities.

The Bureau of Medical Service at Philadelphia (International Exhibition), 1876, compiled and pub. the following statistics relating to cities with over 500,000 inhabitants:

	Number of Years.	Average Pop.	Average Total Mort.	Average Death-rate p. 1000.
Vienna	5	648,560	20,424	31'42
New York	5	994,458	29,601	29'93
Berlin	4	950,000	28,420	29'91
London	5	3,284,488	76,741	23'33
Paris	4	1,851,792	42,724	23'06
Philadelphia	5	744,831	16,573	22'27

FOREIGN CLIMATES, INFLUENCE ON HEALTH.—See CLIMATE; LIMITS OF RESIDENCE, under which last head the whole subject will be discussed.

FOREIGN COUNTRIES, BRITISH FIRE OFFICES INSURING PROPERTY IN.—From a period prob. very early in the 18th century, Brit. Fire Offices commenced to insure risks in other countries—more particularly in the East, where there were no local ins. fire offices as a rule. Such property very frequently belonged to Brit. merchants. Upon such ins. no per-centage duty was collected.

1786.—It was contemplated by the Gov. to render all such ins. liable to duty; but the idea was abandoned under the circumstances stated under FIRE INS., HIST. OF, at this date. The 26 Geo. III. c. 82, of this year (sec. 9), specially exempted the ins. of property in countries *at peace* with Gt. Brit.

1810.—It appears that fire ins. on property in *Brit. Colonies* insured in the U.K. had up to this date paid the per-centage duty. But by 50 Geo. III. c. 35, this was abolished; and a higher stamp duty on the pol. charged. [COLONIAL FIRE INS.]

FOREIGN DECISIONS IN INS. CASES.—It has long been the practice of the Brit. Courts to take cognizance of the decisions of foreign courts in regard to *Marine* Ins. contracts. The theory proceeded upon in this matter is, that maritime commerce by its very nature extends to all parts of the globe; and hence the practice of other countries may guide to just decisions. On this principle the decisions of the Courts of the U.S. are constantly cited before our tribunals, and with very great advantage. A knowledge of the decisions of these Courts in cases of *Fire* and *Life* Ins. also will be found of great advantage: for many of these are among the most comprehensive purviews of the principles involved ever delivered from the Judicial Bench. To this end we give references to American cases under many branches of our subject. [MARINE INS. LAW.]

FOREIGN DECREES.—A Foreign Decree condemning the vessel insured as enemy's property will negative warrant of neutrality in the pol. Such a decree is conclusive in the Courts of Gt. Brit., and must receive effect. [NEUTRALITY.] [PRIZE COURTS.]

FOREIGN ENEMY, INSURING THE SHIPS OF.—See ENEMIES; INSURING ENEMY'S SHIPS.

FOREIGN ENEMY, INVASION BY.—Policies of F. ins. exempt from the scope of their liability all damage resulting from Invasion of "Foreign Enemies," Usurped Powers, etc. When this clause was first introduced does not seem very clear; but prob. before 1767. [FIRE INS., CONDITIONS OF.] [INVASION.]

FOREIGN ENLISTMENT ACTS.—Important questions affecting contracts of marine ins. have sometimes arisen under the Foreign Enlistment Acts, more especially in regard to the seizure and condemnation of ships. [CONTRABAND OF WAR.] [NEUTRALITY.] [PROHIBITED GOODS.] [PRIZES.]

FOREIGN FIRE INS. OFFICES TRADING IN ENGLAND.—The first attempt of which we have any record of the fire offices of foreign countries to trade in England was made in 1856—the inducement then being the evasion of the per-centage duty then payable on all insurances effected with Brit. offices in the U.K. How the attempt was met and defeated has been fully stated under FIRE INS., HIST. OF (1856). [FOREIGN INS. OFFICES IN THE U.K.]

FOREIGN INS. COS. TRADING IN THE U.K. (GENERALLY).—Numerous ins. asso. of foreign nationality have now for some years past estab. agencies or branches in the U.K. The first offices to do this were prob. *marine* ins. asso.; and it is unquestionably a matter of great convenience to merchants shipping goods from all parts of the world, portions of which will be insured at the port of departure, to be in easy communication with the duly-authorized agents of the offices where such ins. may have been effected on the arrival of the cargo. For the same reason of convenience, goods being shipped to foreign ports are not unfrequently insured in the offices of the ports of destination having branches here authorized to accept such risks. The number of these agencies continues to increase.

More recently many foreign *fire* and some foreign *life* offices have been estab. in the U.K. These we speak of under separate heads. We do not attempt a list of foreign ins. cos. trading here, as they fluctuate from year to year considerably.

It may be useful to point out that great caution is required in dealing with ins. offices whose chief place of bus. lies beyond the jurisdiction of our Courts. Where there is a commercial treaty—such as that between *Gt. Brit.* and *France*—the process of recovery is comparatively simple. The remedy is the deposit of funds in the U.K. sufficient to protect the pol.-holders here. [FOREIGN LIFE INS. OFFICES.]

FOREIGN INS. COS. TRADING IN THE U.S.—Nearly every State in the Union has passed laws for the regulation of "foreign ins. cos.," which usually means cos. organized outside each particular State, as well as those from Europe and elsewhere. Mr. H. R. Hayden's *Statutory Requirements relating to Ins. in the U.S. and Canada*, pub. 1876, may be taken as a safe guide to the requirements of these laws. See also May's *Law of Ins.* (1873), p. 718-9, for legal points which have arisen in regard to foreign cos. Changes will continue to be made every year. [AMERICA, BRIT. INS. OFFICES TRADING IN.]

FOREIGN INS. LITERATURE.—It is our purpose in this work to notice all works pub. in foreign

countries bearing upon Ins. and its associated subjects. Many of such foreign treatises, especially on the subject of *Marine* Ins., are of the highest value, and have reflected their light through some of the ablest judgments delivered from our Bench. In *France* and *Germany*, and still more in the U.S., many works of the highest practical value have appeared. These are noticed (1) under the name of their authors; (2) generally, under the subject treated of; (3) in connexion with the country wherein they orig. appear. We can only hope for reasonable, rather than entire, completeness in this department of our labours.

Mr. Francis Baily, in his *Doctrine of Life Annuities*, 1808, says: "Those useful and interesting parts of the science which relate to the subject of Reversions, Survivorships, and Assu., together with their several applications to the various purposes of life, do not enter into any of the foreign treatises which I have had an opportunity of seeing." This is still true; but regarding the theory of mathematical probability, as applied to life contingencies, we have drawn a good deal of our light from abroad.

FOREIGN LIFE INS. OFFICES TRADING IN THE U.K.—By the Assu. Cos. Act, 1870 (sec. 3), every asso. estab. out of the U.K., which should thereafter commence to carry on life ins. bus. in the U.K., was required to deposit with the Accountant General in Chancery £20,000, there to remain until the asso. has accumulated funds out of its life prem. to the amount of £40,000. Where the accumulated funds of the office already exceed this amount, the deposit is a mere matter of form, for it can be immediately withdrawn. [DEPOSIT BY LIFE INS. ASSO.]

Several of the *American* offices trading here have deposits in the names of trustees in Gt. Brit. for the especial benefit of pol.-holders here. The *New York Life* thus has £50,000 deposited; the *Equitable* of N.Y. £20,000 or upwards.

FOREIGN MARINE INSURANCES.—By 28 & 29 Vict. c. 96 (Inland Revenue Act, 1865), sec. 15, pol. executed abroad by cos. carrying on bus. in the U.K. are to be taken to be stamped within 2 months after receipt here. [MARINE INS. POL., STAMP DUTIES ON.]

By 30 & 31 Vict. c. 23 (1867), it is declared (sec. 13) that all persons paying claims under pol. not so stamped are liable to penalty of £100. During the last two centuries many ships and much merchandize belonging to foreigners have been insured in the marine ins. offices of the U.K., especially in times of war; and some complications have resulted therefrom. [ENEMIES, INSURING SHIPS AND PROPERTY OF.]

FOREIGN PASSENGER STEAMERS.—For regulations as to survey of these, when sailing from British ports—see Merchant Shipping Act, 1876, sec. 19.

FOREIGN PORTS.—It is of advantage to the marine underwriter to be familiar with the usages of foreign ports; and of equal advantage to owners and masters of vessels. Many inconveniences arise from the want of such knowledge, and in case of damage and disaster to vessel or cargo, much imposition frequently follows. Questions regarding maritime loans not unfrequently arise in such emergencies. The best authority with which we are acquainted for a guide in such emergencies is a clever little book by Mr. Manley Hopkins—*The Port of Refuge, or Advice and Instructions to the Master Mariner in Situations of Doubt, Difficulty, and Danger* (1873, H. S. King & Co. London). [BOTTOMRY.]

FOREIGN RESIDENCE AND TRAVEL.—This important subject will be fully discussed under LIMITS OF RESIDENCE AND TRAVEL.

FOREIGN SENTENCES.—See FOREIGN DECREES.

FOREIGN SHIPS.—By the Merchant Shipping Act, 1876—39 & 40 Vict. c. 80—sec. 13, any foreign ship lading in a British port, but contravening any of the provisions of this Act regarding overloading, may be "detained," under the conditions therein set forth. [OVERLOADING.]

The Act, 1746—19 Geo. II. c. 37—prohibiting ins., "interest or no interest," does not apply to foreign ships; but the clause against "Re-insurance" in the same Act did. [GAMBLING INS.] [INTEREST OR NO INTEREST.] [RE-INSURANCE.]

FOREIGNERS.—Many questions regarding the rights of foreigners arise in ins. practice; some of these have been considered under ALIENS. Foreigners cannot be owners of Brit. ships; and therefore cannot make lawful ins. upon them. This difficulty is overcome in practice by the employment of English brokers who effect the ins. in their own names. Cargo may be insured by foreigners, and the contract is good, except when they become "alien enemies." [ALIENS.] [ENEMIES.]

It would seem invidious to speak especially of foreigners in regard to ins. claims: but a glance at the indexes of the "Claim Registers" of some of our fire offices would afford ground for reflection. [FIRES, STATISTICS OF, 1869.] [*Statist. Journ.* vol. xx. p. 72.]

FORENSIC, CLERICAL, MEDICAL, ETC.—An ins. asso. under this title was projected in 1854 by Mr. J. H. James. The project ended as it began—in talk.

FORENSIC MEDICINE.—The science of Medicine as applied to *forensic* questions: those, namely, which arise before Courts of Justice. Such as questions touching death and injury to the person; questions respecting mental capacity, disease, inheritance, legitimacy, and many more. It is in fact a modern designation for MEDICAL JURISPRUDENCE, under which head we shall review the subject more at large.

FOREST FIRES.—A vast amount of destruction and consequent loss is occasioned almost every year by the burning of woods and forests. These occur in nearly all parts of the world, and more especially in seasons of high temperature. [FIRES, GREAT.]

In the U.S., as also in *Canada* and the Lower Provinces, the loss from this cause is frequently prodigious; and too often occasioned by sheer negligence.

FORESTS, INS. OF, AGAINST FIRE.—The extraordinarily hot and dry summer of 1868, in consequence of which large numbers of the pine, and other forests on the Continent of Europe ignited, and became more or less destroyed, led to a proposal in *France* for the formation of a co. specially for the purpose of insuring against such losses.

The idea, it appears, was not altogether new. The bus. had previously been undertaken by then existing fire offices; but inasmuch as they did not make any special feature of it, they hardly obtained enough of it to present a fair average. Other, and younger cos. had also tried it, but had charged rates which were considered by owners too high for the risk incurred.

The prosp. of the projected co.—*La Forestiere*—gave the following details: in *France* there are more than a million hectares of resinous forests, of an average value of 500 francs p. hectare—giving a value of 500,000,000 fs. It was supposed that half that quantity might be insured at a prem. of 2 to 2½ fr. p. 1000, or 1 to 1½ fr. p. hectare.

The average loss p.a. for the then last 20 years from fire and lightning was stated to have been 100,000 francs. We do not know what it reached in 1868, but certainly a very much larger sum. In *Russia* the loss that year was very serious.

We believe the project was not taken up warmly. A practical difficulty arises in the circumstance that in a very dry season *all* the risks would become inflammable. The difficulty of selection against the office in these circumstances might be overcome by accepting no risks say between April and Oct. There is room for *fraud* in regard to intentional fires; but this might be mitigated by the paying on a close valuation.

FORFARSHIRE AND PERTHSHIRE FIRE INS. CO.—Founded in Dundee in 1823, with a cap. of £200,000, in 2000 shares of £100 each, of which £10 paid. The name originally adopted was the *Forfarshire F. Office*, but this was changed the first year of the Co. Its bus. was confined to the counties of Forfar, Perth, and Fife. The prem. income averaged £2500 a year, derived mostly from the ins. of non-hazardous risks, and the dividend ordinarily paid to the shareholders was 7½ p.c. The heaviest loss it sustained was one of a little over £3000 by the burning of three of the Dundee churches on the 1st Sunday morning of 1841. [FIRES, GREAT.] It continued till the end of 1856, when its bus. was trans. to the *Northern Assn. Co.*, the proprietors receiving a return of £15 on each share in cash, or at their option in *Northern* shares at a prem. of 50 p.c. A few days after the trans. of the Co., its old signboard was blown down in a January gale! Mr. Patrick Hunter Thoms was Man. of the Co. from first to last.

FORFEITURE.—In Law, a punishment annexed to some illegal act or negligence in the owner of real property, whereby he loses all his interest therein, and it goes to the party injured as a recompense for the wrong which either he alone, or the public with him, hath sustained. Forfeiture is either civil or criminal. Except in treason or murder the forfeiture is only for the life of the offender; in treason and murder, however, the forfeiture extends to the disinherison of the heir.

FORFEITURE, ACT OF.—Any act by the performance, or neglect, of which a co. may lose its charter, or the benefit of its incorp.

FORFEITURE OF INS. POL.—We propose here to review the circumstances under which pol. of ins. of the different classes, *i.e.* the benefits under such pol., will become liable to forfeiture. As a general principle, *fraud* vitiates all contracts; and there are none to which this principle should be applied with more severity than to ins. contracts—the offices having mostly to rely mainly on the statements of the parties in whose behalf the ins. is made. Non-payment of prem. is also a general cause of forfeiture; as also failure to give notice of claim within the stipulated time—a matter of great importance under many ins. contracts. But there are also special stipulations under which forfeiture may arise, varying with the nature of the bus.

Accident Ins.—Pol. of this class become liable to absolute forfeiture—1. For non-payment of renewal prem. 2. For misdescription of occupation or non-notice of change of occupation. 3. Concealment of facts regarding physical defects, liability to fits, and seizures, etc. 4. For voluntary exposure to obvious risks, such as stepping in or out of trains in motion, or going on dangerous water in an open boat alone. 5. For making or attempting to make any fraudulent claim upon the co. 6. From failure to give prompt notice of injury within time specified in pol. [FITS.] [OCCUPATIONS.] [PHYSICAL DEFECTS.] [VOLUNTARY EXPOSURE.]

Carriage Ins.—Forfeiture will result here from—1. Non-payment of prem. 2. From misdescription of vehicle. 3. From concealment of former injuries. 4. From wilfully representing name of builder, and value of vehicle at time of ins. 5. From sending carriage for repair without notice to and consent of co. 6. From failure to aid the co. in recovering damages against offenders. This bus. is yet in its infancy, and the attempted frauds are numerous. [CONCEALMENT.] [FRAUD.] [MISREPRESENTATION.]

Cattle Ins.—Forfeiture results from—1. Non-payment of prem. 2. From mis-

description. 3. From concealment of symptoms of disease, or concealment or mis-statement of its proximity. 4. From wilful exposure at prohibited times in markets or fairs, and generally from breach of isolation or of conformity to Privy Council Orders. 5. From over-valuation of a palpable nature. 6. From failing to give notice to veterinary or district inspector. Other special stipulations arise in these pol., non-observance of which will work forfeiture. [CATTLE, DISEASES OF.]

Fidelity Ins.—Forfeiture results here in either of two forms, viz. to the insured, or to those beneficially interested in the ins. To the *insured*—1. For non-payment of prem. 2. For concealment of facts in personal history. 3. For mis-statement of facts of present occupation, and fiduciary responsibilities. 4. For undertaking prohibited responsibilities, as becoming bound for another, etc. To the *employer*—1. By failing to perform any of the acts of supervision which are stipulated in the pol. 2. By conniving at the escape from justice of the insured in the event of default. In these contracts there will frequently be stipulations of importance which it is impossible to indicate beforehand. [FIDELITY INS.] [FRAUDULENT TRUSTEES ACT.]

Fire Pol.—Forfeiture may result—1. For non-payment of prem. 2. By misdescription of risk. 3. By alteration of premises. 4. By the introduction of new or prohibited hazards, as (a) pipe-stoves, (b) explosive or inflammable substances, (c) steam engines. 5. By removal of the property insured without notice. 6. By alienation, or change of title. 7. By intentional burning. 8. By excessive claim. 9. By failing to furnish required proofs of loss. 10. In some countries forfeiture results from refusing to submit to sworn examination. The usual effect of this is only to delay settlement of claim. [COVENANT TO INSURE.] [DESCRIPTION OF RISK.] [EXPLOSIVE SUBSTANCES.] [FIRE INS., CONDITIONS OF.] [FIRE INS. PRACTICE.]

Glass Ins.—Here forfeiture may arise from—1. Non-payment of renewals. 2. From misdescription of the nature of the glass. 3. From mis-statement or concealment regarding nature of occupation. 4. From misdescription of *Location*. 5. From failing to aid in the apprehension and conviction of persons committing wilful breakage. 6. Breakages resulting from alteration of premises are usually excluded, but do not necessarily work any forfeiture of the pol. [EXPLOSIONS.] [GLASS INS.] [LOCATION.] [MISDESCRIPTION.] [OCCUPATION.]

Hail Ins.—Here there is usually very little room for forfeiture. The pol. are made for one season only, and cover the risk of a certain number of acres of a specified class of grain or seed. Any simple misdescription of acreage, etc., can be rectified on adjustment of loss. Any direct fraud, such as insuring the crops on one estate and claiming for damage on another, will work forfeiture. [HAIL INS.] [HAIL STORMS.] [LOCATION.]

Life Ins.—It is in regard to ordinary life pol. that questions of forfeiture most ordinarily arise, and in regard to which the consequences are more serious to the pol.-holder than in respect of pol. in any other branch of ins. bus., and for several reasons, as—(a) the prem. being equalized for the whole of life, the amount paid in the early years is more than is necessary to cover the risk of those years; in this surplus every pol. has a species of equitable interest; (b) the life may have become uninsurable either wholly, or at least so far that largely extra rates may be required; (c) the person insured may refuse to appear for re-examination in view of a revival of the pol.—this applies to assigned pol. and to ins. on the life of another.

Life pol. ordinarily become liable to forfeiture from: 1. Non-payment of renewal prem. within the prescribed days of grace [these varying with different offices; and in the U.S. there are no days of grace]. 2. Misrepresentation or concealment as to age or otherwise at the time of effecting the pol. 3. If the life insured go beyond the prescribed limits of residence and travel. 4. If the life insured commit suicide [in some offices this is now waived]. 5. If death results from duelling or the hands of justice. 6. If (in the U.S.) death results from following any unlawful pursuit. 7. If there be no *bona fide* interest at the time of effecting the pol. 8. If the name of the person really interested be not inserted. 9. If the pol. be for any gambling or fraudulent purpose.

It is clear that many of these stipulations are necessary to the safe conduct of the bus.; but it is also certain that some of them may be relaxed, not only without injury, but perhaps with advantage to the office. Of late years the race has set—partly as a result of competition, and in part from a better comprehension of the real nature of the contract—in the direction of the lessening of these causes of forfeiture; and on the whole the change is for the better. The direction wherein the change is most advantageous is that of extending the limits of *Travel* and *Residence*, and of waiving the *Suicide* clause after the pol. has been a certain time in force. The rectifying of unintentional errors when communicated to the office immediately upon discovery has long been the practice. On the other hand, prohibition against speculating in lives without pecuniary interest is necessary, on the ground of public safety. The whole subject will be more minutely considered under LIFE POL., FORFEITURE OF.

[DAYS OF GRACE.] [EQUITABLE RELIEF.] [LIFE INS., CONDITIONS OF.] [LIMITS OF RESIDENCE.] [NON-FORFEITURE POL.] [SUICIDE.] [SURPLUS.] [SURRENDER VALUES.]

Marine Ins.—Forfeiture may result—1. From misdescription of class of ship, or of

the cargo. 2. From alteration of voyage. 3. From non-performance of any of the warranties expressed or implied, viz. as to seaworthiness, time of sailing, convoy, neutral cargo, etc. 4. By alteration of the pol. so as to conflict with the requirements of the Stamp Acts. 5. By the adventure being found to be in contravention of the Gambling Acts. It is impossible to do more than give a faint outline of the many incidents which may render a marine pol. liable to forfeiture. [ALTERATION OF VOYAGE.] [CONVOY.] [CORRECTION OF POL.] [CANCELLATION.] [FORBIDDEN PORTS.] [INTEREST OR NO INTEREST.] [NEUTRAL CARGO.] [SEAWORTHINESS.] [SHIPS, CLASSIFICATION OF.] [VOIDANCE OF CONTRACTS.] [WAGER POL.] [WARRANTIES.]

Steam Boiler Ins.—Forfeiture will result mainly from—1. Failure to give notice of any defect in water-gages and other fittings. 2. From any obstruction to periodical inspection by officers of the ins. co. 3. From overloading of valves, or other direct breach of the conditions of safety stipulated in the pol. [WATER.]

It must be remembered that if the managers of an ins. asso. continue to receive prems. under any contract after they have become acquainted with facts which would void the pol., the forfeiture is thereby condoned.

On the other hand, the receipt of a prem. by an agent who has no authority to receive, but strict orders not to receive payment on forfeited pol., is no waiver, unless the co. receives the money from the agent.

Speaking in a general way, it may be said that all forfeitures are odious to the law, and in enforcing them Courts will never search for that construction of language which *must produce a forfeiture*, when it will bear another reasonable construction which will not produce such a result. And sometimes this view is carried by Judges not familiar with the continuous frauds to which ins. asso. are subjected, to an unreasonable extent. It is, however, incumbent upon ins. cos. to frame their forfeiture clauses with such clearness that there can be small ground for misunderstanding their scope. [CONCEALMENT.] [CONSTRUCTION OF INS. CONTRACTS.] [DESCRIPTION OF RISK.] [FRAUD.] [MISREPRESENTATION.] [NOTICE.] [RENEWAL NOTICE.] [VOIDANCE OF CONTRACTS.] [WARFARE.] [WARRANTIES.]

FORFEITURE UNDER COVENANT TO INSURE.—This has been treated of under COVENANT TO INSURE; but the recent case of *Mills v. Griffiths*, before the British Courts, 1876, has lent a new importance to the question. This was an action by a ground landlord to recover premises for a breach of such a covenant. The premises were four houses said to be worth £4000. In 1874 the pol. of ins. were allowed to lapse, but the tenant alleged that it was an accident, and so on that occasion he escaped. But in April, 1876, the pol. were again allowed to lapse, and the landlord again brought his action to recover the premises. The tenant set up Lord St. Leonards' Act for relief against forfeiture, which, however, provides that relief shall only be allowed once. The Judge at Chambers (Baron Amplett) held the breach fatal; the tenant appealed, but the decision was upheld.

FORFEITURE OF SHARES.—It requires to be more generally known that the forfeiture of shares does not release the member from liability to the unpaid calls in respect of which the forfeiture was made; nor, in the event of a winding up, to liability of all sums unpaid on such shares, where it is believed there has been any misuse of power regarding the forfeiture. This latter was the ruling in *Manisty's case* in the *European Arbitration* (Lord Westbury). In an ordinary case of forfeiture, with no application for arrears (and no winding up) within 6 years, we apprehend the Stat. of Limitations can be pleaded successfully.

FORGEMEN, HEALTH OF.—See OCCUPATIONS.

FORMS.—The forms to be used for returns required under the Cos. Act of 1862, and the Life Assu. Cos. Act 1870,—see ACCOUNTS AND ACTUARIAL REPORT,—may be altered by the Board of Trade, with a view to adapt them to the peculiarities of any particular asso. [BOARD OF TRADE.]

FORMULA.—In *Algebra*, the expression of a quantity in algebraical symbols. Every formula may be regarded as an abbreviated rule for the solution of a problem, or as an abbreviated enunciation of a theorem. In *Chemistry*, a concise mode of exhibiting by symbols the results of chemical changes, dependent on the theory of atomic equivalents. They may represent either the actual results of experiments, or indicate theoretical or hypothetical views only. In *Medicine*, a prescription.

FORNICATION, EFFECT OF, ON BIRTHS IN LONDON.—Graunt, in his *Natural and Political Obs., etc., upon the Bills of Mort.*, first pub. 1661, says (ed. 1665, p. 92): "As to the Causes of Barrenness in Lond., I say, that although there should be none extraordinary in the native air of the place; yet the intemperance in feeding, and especially the Adulteries and Fornications, supposed more frequent in Lond. than elsewhere, do certainly hinder breeding." Gregory King, in his *Natural and Political Observations, etc.*, 1696, adopted the same view. [LONDON.] [SMOKE.] [TOWN LIFE.]

FORREST, DAVID, was Sec. in Lond. of *British Guarantee Asso.* from 1855 down to its amalg. in 1862. In 1870 he was Sec. to *Albert Reconstruction Committee*, and worked most efficiently, though unsuccessfully.

FORRISTALL, MICHAEL, was Sec. of Catholic Law and Gen. Life from 1853 until its amalg. in 1857.

FORRY, S.—Pub. in New York, in 1842: *The Climate of the United States and its Epidemic Influences*. A vol. of highly interesting facts condensed into small compass. In the same year he also pub.: *Meteorology*, a work in folio, which we have not seen.

FORSTER, DR. T., M.B., contributed to the *Assu. Mag.* vol. vii. p. 148, a paper: *Inquiry into the Average Longevity of Vegetarians, compared with that of Persons who live on a Mixed Diet.* [FOOD.] [LONGEVITY.]

FORSYTH, THOMAS, C.E., late of Manchester.—He was one of the originators of the idea of insuring against Steam Boiler Explosions; and lost his life by the explosion of a locomotive engine at Sharp's Works, Manchester, in July, 1858, while the *Steam Boiler Ins. Co.*, of which he was a promoter, was in course of formation.

FORT, INS. OF, AGAINST CAPTURE, A LAWFUL INS.—A remarkable case of the ins. of a fort against capture came before the Brit. Courts in 1766; it is known in the books as *Carter v. Boehm*. The facts were these—and they indicate something of the spirit of adventure in regard to ins. which characterized that period. An insurance was made in Lond. 9 May, 1760, at 4 p. c., "interest or no interest," on behalf of George Carter, the Governor of Fort Marlborough, alias Bencoolen, in the Island of Sumatra, for 12 months, from 16 Oct. 1759, to 16 Oct. 1760, against the said Fort being taken by any foreign enemy. The Fort was taken on 3rd April, 1760, by the French. The underwriters at Lloyds, of whom the deft. Boehm was only one, resisted payment of the claim. An action was brought on the pol., and verdict obtained. The value of the Governor's property and effects at the Fort was estimated at £20,000; the total amount insured was £10,000. The underwriters appealed, on the ground of there having been fraudulent concealment when the ins. was obtained. 1. Because the state and condition of the Fort as mentioned in the Governor's letter to the *East India Co.* was not disclosed. 2. Because it was not disclosed that the French, not being in a condition to relieve their friends upon the coast, were most likely to make an attack upon this settlement rather than remain idle. 3. That a letter received from the Governor, and dated in Feb. 1759, from which it seemed that the *French* had a design to take this settlement by surprise the year before, was not disclosed. Regarding these objections Lord Mansfield, in delivering the judgment on appeal, said—and his remarks have great value as showing the skill the underwriter is supposed to bring to bear in the conduct of his bus.:

It is necessary to consider the nature of the contract at the time it was made. The pol. was signed in May, 1760. The contingency was whether Fort Marlborough was or would be taken by an *European* enemy between Oct. 1759 and Oct. 1760. The computation of the risk depended upon the chance, whether any *European* power would attack the place by sea. If they did, it was incapable of resistance. The underwriter in Lond., in May, 1760, could judge much better of the prob. of the contingency than Governor Carter could at Fort Marlborough in September, 1759. He knew the success of the operations of the war in *Europe*: he knew what naval force the *English* and *French* had sent to the *East Indies*. He knew, from a comparison of that force, whether the sea was open to any such attempt by the *French*. He knew, or might know everything which was known at Fort Marlborough in Sept. 1759, of the general state of affairs in the *East Indies*, or of the particular condition of Fort Marlborough, by the ship which brought the order for the ins. He knew that ship must have brought many letters to the *East India Co.*, and particularly from the Governor. He knew what prob. there was of the Dutch committing, or having committed, hostilities. Under these circumstances, and with this knowledge, he insures against the general contingency of the place being attacked by an *European* power. If there had been any design on foot, or enterprise begun in Sept. 1759, to the knowledge of the Governor, it would have varied the risk understood by the underwriter, on account of his not being told of a particular design or attack then subsisting; and he estimated the risk upon the fort of an uncertain operation, which might or might not be attempted. But the Governor had no notice of any design subsisting in Sept. 1759. There was no such design in fact: the attempt was made without premeditation, from the sudden opportunity of a favourable occasion, by the connivance and assistance of the *Dutch*, who tempted Compt. D'Estaigne to break his parole. These being the circumstances under which the contract was entered into, we shall be better able to judge of the objections upon the foot of concealments. The first concealment is that he did not disclose the condition of the place. The underwriter knew the ins. was for the Governor. He knew the Governor must be acquainted with the state of the place. He knew the Governor could not disclose it consistently with his duty. He knew the Governor by insuring apprehended, at least, the possibility of an attack. With this knowledge, without asking a question, he underwrote. By so doing he took the knowledge of the state of the place upon himself. It was a matter as to which he might be informed various ways: it was not a matter within the private knowledge of the Governor only. But not to rely upon that, the utmost which can be contended is, that the underwriter trusted to the Fort being in the condition in which it ought to be: in like manner as it is taken for granted that a ship insured is seaworthy. What is that condition? All the witnesses agree, that it was only to resist the natives, and not an *European* force. The pol. insures against a total loss, taking for granted that if the place was attacked, it would be lost. The contingency, therefore, which the underwriter has insured against, is, whether the place would be attacked by an *European* force; and not whether it would be able to resist such an attack, if the ships could get up the river. It was particularly left to the jury to consider whether this was the contingency in the contemplation of the parties; they have found that it was. And we are all of opinion that in this respect their conclusion is agreeable to the evidence. The state and condition of the place were material to this view only, in case of a land attack by the natives.

In another part of his judgment he said:

An objection occurred to me at the [former] trial, whether a pol. against the loss of Fort Marlborough, for the benefit of the Governor, was good, upon the principle which does not allow a sailor to insure his wages. But considering that the place, though called a Fort, was really but a Factory or Settlement for Trade, and that he, though called a Governor, was really but a merchant; considering also that the law allows the captain of a ship to insure goods which he has on board, or his share in the ship, if he be a part-owner; and the captain of a privateer, if he be a part-owner, to insure his share: considering also that the objection could not, upon any ground of justice, be made

by the underwriter, who knew him to be a Governor at the time he took the prem.; and as, with regard to the principles of public convenience, the case so seldom happens (I never saw one before), any danger from the example is little to be apprehended: I did not think myself warranted, upon that point, to non-suit the plt.; especially as the objection did not come from the bar. Though this point was mentioned at the last trial, it was not insisted upon, nor has it been seriously argued upon this motion, as sufficient alone to vacate the pol.; and if it had, we are all of opinion that we are not warranted to say that it is void upon this account.

We believe there is no similar case in the law books; but it is certain that ins. upon the capture or holding out of certain besieged cities during the European wars of the last century were very constantly made. [GAMBLING INS.]

FORTH MARINE INS. CO.—Founded in Leith in 1839, under a Deed of Co-partnery dated 17 April in that year, for the purpose of carrying on the bus. of ins. broking, marine underwriting, and ins. ships and merchandize against the perils of the seas.

In 1842 the Co. obtained the authority of a Special Act of Parl.—5 & 6 Vict. c. xcix.—*An Act to enable the Co. to sue and be sued*, etc.

We believe the Co. has long since passed out of existence.

FORTHWITH.—Where the conditions of a pol. require that notice of any given event or circumstance is to be "forthwith" given to the Co., or returns "forthwith" sent in; or a payment of extra prem. is to be "forthwith" made, the term will be construed in the light of the circumstances surrounding each case; as frequency of the mails, facility for telegraphing; nature of work to be performed, etc., and will be left to the jury. This subject will be more conveniently discussed under NOTICE.

Where an ins. pol. provides that in the event of the doing of some prohibited thing, or of not doing something warranted to be done, the risk of the underwriter shall "forthwith" terminate; the risk as a matter of fact would cease from the moment of the breach, although the fact might not become known to the underwriter until long after. [ALTERATION OF VOYAGE.] [DEPARTURE OF SHIP.]

FORTREY, SAMUEL, a Gentleman of the King's Bedchamber, pub. in Cambridge in 1663: *England's Interest and Improvement, consisting in the Increase of the State and Trade of this Kingdom*. 2nd ed. 1673; 3rd, 1744. Reprinted in *A Select Collection of Early English Tracts on Commerce*, pub. by the Political Economy Club, London, 1856. [INTEREST ON MONEY.] [USURY.]

FORTUNATE OFFICE FOR PROVIDING MARRIAGE PORTIONS.—Founded about 1710. [MARRIAGE INS.]

FORTUNE, E. F. T., Stockbroker, pub. in 1796: 1. *An Epitome of the Stocks and Public Funds*; 2nd ed. 1815; 16th ed. by D. M. Evans, 1851. 2. In 1796: *History of the Bank of England*. 3. In 1809: *A Treatise on National Life Annuities*.

FORUM REGNI VALENCIÆ.—A code of laws promulgated by King James in Valencia in 1250, and printed with add. in 1527, under the above title. We have already given an account of this code under COSTUMBRES DE VALENTIA.

FOSTER, E. R., was Resident Director of *Britannia Life* from 1850 to 1857.

FOSTERLAND.—Lands allotted for the maintenance of a person.

FOTHERGILL, CHARLES GEORGE.—General Manager of *London and Lancashire Fire* since December, 1874. Mr. Fothergill commenced his ins. training in the *Westminster Fire* in 1849.

1857. He read a paper before the Inst. of Act.: *On the Causes of Fires in London during the 24 Years from 1833 to 1856 inclusive, with some Remarks on the Deduction of Correct Rates of Prem. for Fire Ins.* [Assu. Mag. vol. vii. p. 91.] This paper indicates much thought and observation in a useful direction. [FIRE INS. PREMS.] [FIRES AND FIRE INS., STATISTICS OF.]

1861. March. Mr. Fothergill was selected to fill the office of Assist. Sec. of the *Royal* at the head office. In Sept. of the same year he became Assist. Sec. of same office in London.

1868. Became Sub-Man. of *Royal* in head office on death of Mr. Dove, and appointment of Mr. McLaren as his successor.

Mr. Fothergill has visited the principal countries of Europe, and also the U.S., in view of making himself thoroughly familiar with fire risks in these countries. He had formed an opinion adverse to fire risks in *Chicago* before the great fire of 1871; and to this fact in part at least may be ascribed the small loss of the *Royal* by that event.

FOTHERGILL, DR. JOHN.—In his collected works, edited by John Coakley Lettsom, and pub. 1783, he treats in vol. i. (*inter alia*) of the *Weather and Diseases of Lond.*; and in vol. ii. of *Bills of Mort.*

FOTHERGILL PRIZES.—Under the will of Dr. Fothergill, funds were bequeathed to the So. of Arts, in 1821, for the offer of a medal; and the following subjects were proposed to the So. for their consideration: 1. The best method of preventing destructive fires, and of detecting incendiaries. 2. Of speedily extinguishing fires when water is scarce. 3. Of speedily securing valuable property from the flames, and also from thieves. 4. Of preventing or diminishing the numerous fatal disasters from fashionable muslin dresses catching fire, whether by rendering such dresses less combustible, or having constantly in readiness a large cloak of incombustible fabric, composed of asbestos or amianthus, with which instantly to enwrap the whole body. "Paper of this kind (incombustible) might

preserve from fire valuable deeds and other manuscripts. A premium for the encouragement of such a manufacture is also earnestly recommended." "The above to be varied at the Society's discretion."

For the Session 1873-4, the Society's gold medal was offered as follows: "Uninflammable Wood.—For the economic production of an uninflammable wood, so as to render buildings in which it is employed less destructible by fire."

FOUL.—In nautical matters, a term applied to the wind when contrary; also to the bottom when uneven and rocky; and to the hull of the vessel when covered with barnacles, etc.

FOUNDATION POL.—Several of the life ins. offices of *Australia* have raised the preliminary funds for their estab. by the issue of "foundation pol." Thus in the Rep. of one Asso. we find it stated: "It was determined that 100 pol. to be called foundation policies should be granted to members on payment of £100 stg., for a sum to be computed on the ordinary single payments (T. ii.) with a bonus of 50 p.c. added to the pol., etc. The Asso. actually issued 67 such pol. insuring £19,149 os. 11d., and received in cash for these £6700, which would have insured £12,706 os. 8d. at its own rates. The £6383 os. 3d. was therefore a bonus for the advances so made, falling to be paid as the lives dropped off. We mention the circumstances as an historical novelty in modern times. We know that special advantages were offered to the first members in some of the early life offices of the U.K."

FOUNDERING AT SEA.—Every year a number of vessels are supposed to be lost by foundering at sea. The evidence in such cases is rather presumptive than real: for it is very rarely that a ship is actually seen to go down; and still more rare that a ship so seen to disappear should be capable of absolute identification. Losses of this class have to be judged of in regard to the prob. of the case. A vessel clears from a certain port on a certain day. The nature of her cargo is known. The course she will sail is also known, having regard to her destination. The weather she encounters on her voyage will be prob. known sooner or later from the logs of other vessels sailing about the same time in the same seas. These incidents may be supplemented by the picking up of part of her hull or furniture or one of her boats—this latter not very conclusive—or something known to have belonged to her. Sometimes a bottle or case containing a statement of facts, the handwriting being capable of verification. But in all such cases, in the absence of direct proof, the reasonable presumption must be relied on; and this is the course the practice takes. It is not unreasonable for an underwriter paying a loss under such circumstances to ask for an indemnity.

1744.—In the case of *Green v. Brown*—the first of this character recorded in the English law books—the facts were as follow: The ship "Charming Peggy" was insured in 1739 from North Carolina to Lond., with a warranty against captures and seizures; and in an action the loss was laid to be by sinking at sea. All the evidence given was that she sailed out of port on her intended voyage, and had never since been heard of: and several witnesses proved, that in such a case the presumption is that she foundered at sea, all other sorts of losses being generally heard of. The underwriters insisted, that as captures and seizures were exempted from the pol., it lay upon the insured to prove the loss in the particular manner declared on. But the C. J. said it would be unreasonable to expect certain evidence of such a loss, as where everybody on board is presumed to be drowned: and that all that can be required is the best proof the nature of the case admits of, which the plt. had given; he therefore left it to the jury, who found the loss according to the plts. declaration. [INDEMNITY.] [PRESUMPTIVE LOSS.]

FOUNDLING HOSPITALS.—Institutions wherein illegitimate children, and sometimes others, are reared at the expense of the State, or at the expense of funds specially bequeathed for such purpose. There has been much debate upon the use and abuse of these, into which we do not propose to enter. We merely put on record here a few facts important for the purpose of reference.

787.—A species of F. Hosp. was set up in *Milan* this year. And in the Middle Ages most of the continental cities had one.

1070.—The Order of Brothers of the Holy Ghost was estab. for the express purpose of taking care of sick, orphans, and foundlings. This order also rapidly spread; but appears to have afterwards been discouraged, as regards foundlings, by the Romish Church.

1670.—The great F. Hosp. of *Paris* was founded this year. In 1680 it admitted 890 children; in 1784 no less than 40,000. In 1790 the French Gov. declared foundlings to be "Children of the State." In 1809 the great F. Hosp. of *Paris* admitted 69,000 children; in 1826, 118,000; in 1848, 98,872. These children could not be all reared at the hospital, and have been placed out to nurse, with a terrible sacrifice to life. [INFANT MORT.] The number of children received into the F. hospitals of *France* varies greatly in the different provinces, being greatest in the north, centre, and south; least in the eastern departments bordering on Germany, and in the western, or Brittany, La Vendée, etc. It has been stated [Terme and Montfalcon, *Histoire des Enfants Trouvés*] that it is "not poverty but luxury which produces exposures" in *France*. It has been recently asserted that the mort. of foundling children in *France* is still about 60 p.c.

1704.—An hospital of this class was estab. at *Dublin* this year. We believe it never

assumed large proportions. In consequence of the excessive mort. and on moral considerations the same was closed by order of the Gov. in 1835.

1739.—The estab. of an hospital in *London* for exposed children or foundlings was recommended by Addison in the *Guardian*, No. 105. It was not, however, till this year that the recommendation was acted upon; and then the F. Hosp. was organized through the exertions of a benevolent individual named Thomas Coram, a sea captain, who left his property to support the inst. The present building was not opened until 1756. The original design was for the indiscriminate admission of deserted children. The funds belonging to the hospital being however quite inadequate to permit of this being done, Parl. was applied to for assistance, which being granted, the numbers of children on the estab. and its expense increased so very rapidly as to attract the attention of Gov. and of the public. The policy of the inst. was called in question; and it was contended that instead of being advantageous, the indiscriminate admission of children was really productive of a great increase of profligacy and immorality. Parl. having concurred in this opinion, it was decided in 1760 that the practice should be abandoned; and the mode of admission to the charity was then so much altered, and placed under so many limitations, that it has since been only nominally a foundling hospital. This is the only inst. of the kind in Gt. Brit.

1772.—The F. Hosp. of *Moscow* was founded by Catherine II. It receives ann. about 12,000 children. The boys are trained for the army and navy; the girls for nurses, etc., many of the better looking being selected for the *corps de ballet*, which is perhaps the most brilliant in the world.

Towards the end of this century inquiries were instituted regarding the mort. of children in F. Hosp., with the following results: *Paris*, 80 p.c.; *Marseilles*, 90; *Dublin*, 91.

It has been asserted more recently that in *St. Petersburg* 45 p.c. of the children born are exposed; in *Rome*, 28; in *Lisbon*, 26; *Vienna*, 23; *Paris*, 21.

1845.—The 6th Rep. of Reg.-Gen. pub. this year, says: "In the foreign states the returns of the large cities almost invariably show an excess of illegitimate children; but the excess is in no slight degree due to the existence of foundling hospitals, which serve to attract, receive, and, as statistical facts demonstrate, *destroy* illegitimate children upon a very large scale." [INFANT MORT.]

McCulloch, in his *Lit. of Pol. Economy*, pub. this year, says: "On the whole we should, generally speaking, be disposed to agree in opinion with those who think that foundling hospitals are disadvantageous, or that the evils to which they give rise exceed those which they obviate. At the same time it must be admitted that this is a subject which is encumbered with not a few difficulties, and that much depends upon the condition and habits of the society in which the hospitals are erected."

In *France* there is a literature upon this subject. In *England* it is treated of by various writers. See *Hume's Essays Moral and Political*, first pub. 1741. See also *Malthus on Pop.* See also *Journ. of Statistical So.* vol. i. p. 348; vol. xviii. p. 56; vol. xxii. p. 505; vol. xxix. p. 9. [ILLEGITIMATE BIRTHS.] [INFANT MORT.] [POP.]

FOUNDINGS.—There are no regular returns of these kept in the U.K. In 1847 the number found in *England* was 21—12 boys and 9 girls; about half in the neighbourhood of *London*.

FOURIER, M. JOSEPH.—A great mathematician, statistician, and philosopher, born at Auxerre (France), 1768. Before 1787 he had sent to Paris a memoir: *On the Theory of Equations*, to be presented to the Academy of Sciences. Other memoirs followed. He also pub. *Annales de Physique*. In 1821 (in 8vo.): *Recherches Statistiques sur la ville de Paris et le Département de la Seine, recueil de tableaux dressés et réunis d'après les ordres de M. de Chabrol, conseiller d'état, Prefet du Département, Paris, . . . C. Ballard, imprimeur du roi.* Also in 1823, 1826, 1829, vols. of the same work in quarto. The reasons for these vols. being pub. without Fourier's name are set forth by the late Prof. De Morgan in *Assu. Mag.* vol. xiv. p. 89. These vols. contain papers on the formation of Pop. and Life T., and on the value of the mean of obs. In 1822 he pub. *Théorie de la Chaleur*; and in 1831: *Analyse des Equations déterminées*.

Prof. De Morgan speaks of him as "the originator of mathematical results of the first order of genius, novelty, and utility." See *English Cyclo.*, department Biography, for a more complete memoir. [MORT. T.] [PARIS.]

FOWLER, CHARLES, Architect and District Surveyor under the Metropolitan Building Act. —He gave evidence before the Select Parl. Committee on Fire Protection in 1867. "I believe that if the space between the joists or beams over any floor were partly filled with concrete, or plastering made sufficiently strong, and supported by iron bars or small pieces of wood properly fixed between the joists, and the ordinary ceiling were plastered underneath, it would require a much more severe fire than usually takes place to pass through the floor." (790.) "You consider plaster as at present made in this country a good non-conductor of heat?—When well made, it is one of the best non-conductors of heat." (791.) "You think that it is an advantage adding plaster of Paris?—Yes; in *Paris* it is used exclusively, and that makes an exceedingly powerful resistant to fire." (794.) "Would you recommend putting iron beams in such roofs, or do you think that good plaster is quite sufficient?—I think that wood and good plaster are quite sufficient."

(796.) "I should prefer in most cases to have oak beams if well protected by plaster."
(798.) "Fire does not act on oak as it does on fir." (903.)

FOWLER, HENRY, was Sec. of *Farmers and Graziers Mut. Cattle*, from its estab. 1844, for several years onwards.

FOWLER, JOHN A. [frequently designated Dr. Fowler], of Philadelphia.—Ed. of *The American Exchange and Review*: founded 1862, and until recently a journal of finance, ins., manufactures, etc., and an expositor of social and economic science. [With 1877 it began to limit itself entirely to the treatment of ins. topics—a change we most heartily welcome.] He commenced his career of ins. journalism in 1856 as associate ed. of *Tuckett's Ins. Journal*, with Mr. Hadden.

Mr. Fowler is a gentleman of great erudition, and is held in high regard in ins. circles, as also by the members of the ins. press, throughout the U.S. "The best ins. writer in the U.S., all assertions to the contrary notwithstanding."—*Baltimore Underwriter*, Aug. 1872. "Mr. John A. Fowler, the Ed. of the *Exchange and Review*, is the most scholarly writer on the ins. press in America—closely logical, clear, terse and elegant; he exhibits a range of intellect and breadth of view that entitle him to the highest rank as a public writer. But, as modest, reticent and retiring as he is gifted and capable, he closets himself with his books, and keeps aloof from the busy throng of his fellow-men, whose actions he surveys and judges with the calm impartiality of a stoical philosopher. What a splendid Superintendent of Ins. for Pennsylvania John A. Fowler would make! So mote it be some day."—*New York Underwriter*, 1872. He is the author of the following works:

1. 1860.—*Pennsylvania Ins. Handbook*, wherein the rise and progress of ins. in its several branches in the Quaker city is traced with pleasing minuteness.
2. 1861.—*Underwriters Annual Register for 1861, containing an Exhibit of the Financial Condition and Bus. Position of all Cos. issuing Pol. of Ins. in the City of Philadelphia, embracing both Pennsylvania Corporations and Corp. represented by Agencies.*
3. 1868.—*The Pennsylvania Ins. Digest*. These works are all pub. in Philadelphia.
4. 1876.—*The Fire Ins. Prem.*—a small pamph. full of reflections and suggestions for the fire underwriter; and embodying a well-considered attempt to place the bus. of fire ins. upon a scientific footing.

Mr. Fowler has long had in contemplation the preparation of: *A Calculus of Compound Int., as affected by Death Contingencies and other Prob.* We trust he will soon find leisure for the purpose.

Mr. Fowler's estimate of an ins. journal is that it "should not be a gazette mainly of the delinquencies of the craft, but a record of careful analysis of practice, with investigation of principles; and pre-eminently a medium for the enlargement and improvement of the statistical basis."—*Private Correspondence*.

The graceful hospitality of himself and his charming wife, as also of his friend and partner Mr. Whiting, during the Centennial 1876, will always be a theme of pleasing remembrance.

FOWLER, W. C., pub. 1859 a pamph. relative to the case of W. C. Fowler and others v. the *Scottish Equitable Assu. So.* The case will be referred to in our history of that office.

FOX, JOSEPH JOHN, Surgeon, Stoke Newington.—Read before the Statistical So. of Lond. 1858, a paper: *On the Vital Statistics of the Society of Friends*. This paper is pub. in *Statist. Journ.* vol. xxii. p. 208. In the same vol. is contained a "Supplementary T." to this paper, wherein is given a Life T. for the So. of Friends. These will be fully reviewed in our art. FRIENDS, SO. OF.

In 1860 Mr. Fox read before the Brit. Asso. meeting at Oxford, a paper: *On the Province of the Statistician*, wherein the subject is treated with much ability. [STATISTICS, SCIENCE OF.]

FRACTION.—In Arithmetic, technically, one or more aliquot parts of unity. In order to form a precise idea of the fraction of any unit, we must consider such unit to be divided into a certain whole number of equal parts, of which parts any one or more is designated a fraction, *i.e.* a fraction of the whole unit. Thus for purposes of computation, the £ stg. is divided into 100 or 1000 or any greater number of parts; the year the same. See DECIMAL NOTATION. [POUND STG., FRACTION OF.] [YEAR, FRACTION OF THE.]

FRACTION OF A DAY.—The law makes no fraction of time, but in cases of necessity, and for the purposes of justice; when therefore a thing is to be done upon one day, all that day is allowed to do it in. Every minor comes of age on the day preceding the anniversary of his 21st birthday, and may act as of full age the first moment of that day.—*Wharton*.

FRACTION OF A £ STG.—POUND STG., FRACTION OF.

FRACTION OF A YEAR.—YEAR, FRACTION OF THE.

FRACTURA NAVIUM.—Wreck of shipping at sea.

FRACTURE.—A "solution of continuity" of one or more bones. It is termed *transverse*, *longitudinal*, or *oblique*, according to its direction in regard to the *axis* of the bone. Fractures are distinguished as: 1. *Simple*, when the bone only is divided. 2. *Compound*, the same sort of injury, with laceration of the integuments. 3. *Comminuted*, when the bone is broken in several places. 4. *Complicated*, when an artery is lacerated, or some other injury is added to the fracture.

FRACTURES AND CONTUSIONS (Class, VIOLENT DEATHS; Order, *Accident or Negligence*.)—

The deaths from these causes in Eng. show a considerable increase of late. In ten consecutive years they were as follows: 1858, 5159; 1859, 5482; 1860, 5417; 1861, 5589; 1862, 5397; 1863, 5852; 1864, 6500; 1865, 6843; 1866, 6661; 1867, 6596. Showing a variation from 267 deaths p. million of the pop. in 1858, to 288 in 1863, and 310 in 1867. Over a period of five years, ending 1864, they averaged 286 p. million. In 1874 the deaths from these causes reached 7374, or 314 p. million of the pop.

The deaths of 1867 were: males, 5603; females, 993. Of the *males* 231 were under 5; 260 between 5 and 10; 434 between 10 and 15; 545 between 15 and 20; 564 between 20 and 25; 873 between 25 and 35; 798 between 35 and 45; 703 between 45 and 55; 575 between 55 and 65; 367 between 65 and 75; 166 between 75 and 85; 36 between 85 and 95; and 1 over 95. Of the *females* 143 died under 5; 83 between 5 and 10; 36 between 10 and 15; 24 between 15 and 20; 18 between 20 and 25; 39 between 25 and 35; 57 between 35 and 45; 84 between 45 and 55; 114 between 55 and 65; 146 between 65 and 75; 176 between 75 and 85; 71 between 85 and 95; and 2 over 95.

FRAME RISKS.—Usually for brevity called "Frames." A designation applied by F. underwriters in the U.S. to timber-built houses, and out-houses. Brick buildings surrounded by timber buildings, *i.e.* "Exposed by Frames," are charged extra rates varying with the nature and extent of the exposure. [SCHEDULE RATING.]

"Frame Ranges" are buildings of wood in close proximity to each other. To constitute a frame range it is not necessary that the buildings should stand in a compact row. If they adjoin round the corner, or by rears, or stand 30 ft. or less apart, they are to be regarded as a "range."—*Griswold*.

FRAMING.—In Architecture, the rough timber-work of a house, including floors, roofs, partitions, ceilings, and beams. Generally any pieces of wood fitted together with mortises and tenons are said to be framed together; as doors, sashes, sash-frames, etc.

FRANCE.—The Roman *Gaul* [Latin *Gallia*]. One of the most extensive, most populous, and most wealthy countries of Europe. It is situated between lat. 42° 20' and 51° 5' N.; and long. 4° 50' W. and 8° 25' E.—being therefore wholly included in the Isothermal lines, or temperate zone. It is bounded N. by the German Ocean and the Straits of Dover; N.W. the English Channel; W. the Atlantic (Bay of Biscay); S. Spain and the Mediterranean; E. Italy and Switzerland; N.E. Germany and Belgium. In its *physical* features, the Alps in the E., and the Pyrenees in the S.W., connect the mountains of France with the most magnificent ranges in Europe.

The *Climate* of France varies very much, not simply in consequence of the geographical extent of the country, but more especially in regard to its coast lines, and its mountain ranges. On the whole it has the most favoured climate of any country in Europe, as is indicated by its vegetation and agriculture. It has either indigenous or completely naturalized no less than 7000 plants or vegetable productions; of these, however, only one-half (3500) can be regarded as necessary to the existence and comfort of man. *Germany* has about 2500; *England* about 1500. The *Forests* form a great feature in France, and are a great source of wealth in this wood-bearing country.

The *Geographical* extent of France has been the subject of frequent change, arising from conquest, defeat, treaties, etc. These changes may be sufficiently indicated by the varying number of departments—premising that, previous to the Revolution, France was divided into 40 governments. In 1790 it was divided into 83 departments. These gradually extended to 130, by the acquisition of Corsica, Geneva, Savoy, and other places. In 1815 they were reduced to 86. In 1860 they were increased to 89, by the acquisition of Savoy and Nice. In 1871 reduced to 86 by the loss of Alsace and Lorraine.

The 89 departments in 1866 were sub-divided into 373 arrondissements, 2941 cantons, and 37,548 communes.

The *Area* of France in 1866 was 543,051 sq. kilometres, or 207,480 Eng. sq. miles. In 1872 it was found to be 528,577 sq. kilo., or 201,900 Eng. sq. miles—or 5580 sq. miles less.

The effect of these changes upon the pop. has to be kept in mind in reviewing the census returns. The *wars* which have resulted in these changes have also had an effect upon the pop. These will be considered under the general title WARFARE.

The *Hydrography* of France has a considerable bearing not only on the fertility and the climate, but also upon the health of the people. We propose to put a few facts on record here, for the purpose of reference in relation to the divisions of this art. which follow. The area of the principal river-basins is as follows:

River.	Sq. M.	River.	Sq. M.
Loire	4480	Allier	617
Gironde	3156	Durance	517
Rhone (French part)	3095	Marne	501
Seine	3002	Vilaine	443
Garonne (as far as Bec d'Amber)	2161	Yonne	405
Saone	1148	Charente	378
Dordogne (as far as Bec d'Amber)	902	Meuse (French part)	280
Adour	656	Rhine (French part)	319 ?
Moselle (French part)	648 ?		

An exhaustive official inquiry into the *Cultivation of the Soil* of France, made in 1862—when the area of the country amounted to 543,051 sq. kilo. against 528,577 sq. kilo. as at present—gave the following results :

Cultivation.	Extent, Sq. Kilomètres.
Arable land (<i>terres labourables</i>)	265,686
Meadows (<i>prairies naturelles</i>)	50,243
Vineyards	23,208
Woods and Forests	91,677
Commons and Waste Lands (<i>pasturages et pacages</i>)	65,462
Orchards, etc. (<i>cultures arborescentes</i>)	8,543
Buildings, Roads, etc.	38,271
Total	543,051

The land is very equally divided among the whole of the pop. According to the latest official returns the cultivated land of France was divided into 5,550,000 distinct properties. Of this total the properties averaging 600 acres numbered 50,000 ; and those averaging 60 acres, 500,000 ; while there were 5 millions of properties under 6 acres.

The census returns of 1872 showed that there were 18,513,325 individuals—comprising 5,970,171 heads of families, and the rest dependents—engaged in agriculture.—*Martin's Statesman's Year Book*, 1877.

The value of the exports of French produce in 1875 reached £160,886,480—a larger sum than in any previous year. The imports for home consumption reached £146,891,440—being less than in the preceding year.

Population.—Of late years the most ample accounts of the progress and distribution of pop. in France are given in the statistical returns pub. by order of the government. We require for the purposes of reference to go further back. According to the best attainable information we believe the progress of the pop. to have been as follows :

Years.	Population.	Increase during the Period.	Annual Average of Increase.
1700	19,669,320	—	—
1762	21,769,163	2,099,843	55,259
1772	22,672,000	902,837	90,283
1784	24,800,000	2,128,000	177,333
1801	27,349,000	2,549,003	149,941
1806	29,107,425	1,758,422	351,685
1811	29,092,000	decrease	decrease
1821	30,464,875	1,372,875	91,505
1826	31,858,937	1,397,062	279,412
1831	32,569,223	710,286	142,057
1836	33,540,910	971,687	194,337
1841	34,136,695	676,809	135,362
1846	35,400,486	1,170,308	254,062
1851	35,783,170	382,684	75,537
1856	36,039,364	256,194	51,238
1861	37,472,732	1,500,422*	152,862
1866	38,067,094	594,362	118,872
1872	36,102,921	decrease †	decrease

* Of this increase 736,113 was due to annexation.

† The surrender of *Alsace* and *Lorraine* occasioned a loss in pop. of 1,597,219, leaving 366,954 to be accounted for by war, etc.

The general question of the progress of the pop. in *France* is considered under sub-heading *Vital Statistics* ; sub-section *Pop.*

Paternal Government.—We must remember in considering the subject of Ins. in France that the Gov. of that country continually assumes paternal functions, and steps in to relieve the distress occasioned by disasters which, from the frequency or regularity of their recurrence, may be regarded as of an ordinary rather than an extraordinary character. Thus M. le Hir, in his pamph. on ins. pub. in 1859, and hereinafter more particularly referred to [sub-heading *Agricultural Ins.*], says :

The Gov. distributes, every year, amongst those who suffer from ordinary losses by hail, frost, inundation (floods), cattle epidemics, fire and other accidents, 2 millions of fr. [£80,000], independent of those extraordinary cases of such calamities for which special funds are voted. To this amount we must add as much more for remission of taxes, or about 4 millions of fr. [£160,000] for ordinary relief. But from 1838 to 1853 the amount of ordinary losses reported to the Minister was one milliard and 84 millions of fr. [£40,336,000]. If we compute the relief accorded by the Gov. at 4 millions a year [£160,000], the total in that period would be only 64 millions [£2,560,000] or 3'42 p.c. ; a scarcely appreciable part of the damage occasioned.

In other forms too the paternal character of the Gov. is made manifest. See sub-heading *Accident Ins.*, etc.

Laws relating to Ins. Asso.—It seems desirable at this preliminary stage to review the laws now in force regulating the estab. of ins. asso. in France.

By the *Code of France* (formerly known as the *Code Napoleon*), as confirmed by the Law of 24 July, 1867, cos. in the nature of *Tontines* and *Life Ins. Asso.*, mutual, or with fixed prem. (*à prime fixe*), are subject to the authorization and supervision of the Gov. Other ins. asso., as fire, marine, etc., may now be formed without special authorization. A regulation of public administration shall determine the conditions under which they may be constituted. Such a regulation of public administration for the constitution of ins. asso. was promulgated by Imperial Decree, dated 22 Jan. 1868, and we now propose to survey its provisions.

It may be well first to notice that, according to the general law of France, three forms of commercial partnerships are authorized: 1. The *Société en nom Collectif*. 2. The *Société en Commandite*. 3. The *Société Anonyme*. The first is that into which two or more persons enter, and which has for its object to carry on trade as a firm; and the names of the partners can alone compose the firm. The second is entered into by one or more partners jointly and severally responsible, and one or more partners who are simply depositors of funds, and are called *Commanditaires*, *Associés en commandite*. It is carried on under the partnership name, and the managing partners are responsible without limitation to the depositors.

The third—the *Société Anonyme*—does not exist under any partnership name; it is qualified by the designation of the object of the enterprise, and in that sense resembles our own joint-stock cos. The directors are not personally responsible otherwise than for the proper execution of the powers they have received. The members are liable only to the extent of their subscription to the co. The cap. is divided into shares; and there must be at least 7 members. In a word, it is a Limited Liability Co.

Independently of the three kinds of partnerships enumerated, the law recognizes *Associations Commerciales en participation*; which are, in fact, limited partnerships.

Ins. Asso. specially.—Turning again to the regulations more especially applying to Ins. Asso., these class and rank under two heads:

1. *Proprietary Cos.*—These are termed *Sociétés Anonymes d'Assurance à primes*; and are subject to the laws regulating *Sociétés Anonymes*. The co. is not validly constituted until after the payment of a guarantee cap., which shall not in any case, even when the partnership is less than 200,000 frs., be less than 50,000 frs. The shares may only be converted into certificates to bearer when the reserve fund is equal to the uncalled cap.; and all the cap. must be subscribed. The co. at first is bound to apply at least 20 p.c. of the net profits to form a reserve fund; but this process becomes optional when the reserve fund is equal to one-fifth of the cap. The funds of the co. beyond those required for the current bus. must be employed in the acquisition of *immovables*, as ground-rents, or railway securities, having interest guaranteed by the State.

Every policy must state—1. The amount of the partnership capital. 2. The portion of the cap. already paid or called up, and the resolution, if any, by which the shares may have been converted into shares to bearer. 3. The maximum which the co. may by the terms of its articles of asso. insure upon a single risk, without re-ins. 4. In the case where the same cap. shall cover, by the terms of the art. of asso., risks of a different nature, the amount of this cap., and the enumeration of all the different risks.

Every person insured may at any time, by himself or his attorney, inspect the last inventory [see definition later] either at the principal office or at the agencies estab. by the co. He may also require a certified copy to be delivered to him upon payment of a sum not exceeding 1 franc.

2. *Mutual Ins. Asso.*—These are known as *Sociétés d'Assurances Mutuelles*, and may be formed by an authenticated (notarial) deed, or by a deed under private signature, made in duplicate, without any limitation as to numbers. The art. of asso. must state—1. The object, the duration, the principal places of bus., the denomination of the asso., and the territorial area of its operations. 2. Include the T. of the classification of the risks, the tariffs applicable to each of them, and determine the forms in accordance with which this T., and these tariffs may be modified. 3. Fix the number of members, and the minimum of the amounts insured, below which the asso. cannot be validly constituted; as well as the sum to be contributed in the first year, which must be paid before the constitution of the asso.

Certain other formalities have to be gone through, then a meeting of the signatories of the original deed is held, and the administration of the asso. is determined upon. Members may retire at the end of five years, on giving the asso. notice six months previously. The regulations for management are given very much in detail, in the statutes.

This is but an outline of the general requirements in regard to each class of asso. The details imposed are of a very minute character, and will be fully reviewed under sub-heading *Regulations for the Founding and Management of Ins. and other Asso.*, later in this art. See also sub-heading *Fire Ins. Cos.*

Explanatory.—We have to treat of *France* simply in regard to the origin and development of its Ins. institutions, and its Vital Statis. These may be best considered by being grouped under their respective sub-headings, placed in alphabetical order. It will be seen in what a marked manner the ins. contracts of France have been warped into their present shape by reason of the laws there prevailing and affecting the rights of parties towards the State and towards each other. This single fact proclaims how much ins. has become a *national necessity* in civilized countries.

It is remarkable how small is the amount of knowledge generally possessed in England of the progress and working of the ins. asso. of France. It is our present endeavour to remedy this difficulty; although the magnitude of the subject when considered in all its details would almost suggest a separate treatise. We have in view here the treatment of the subject only so far as it becomes necessary to the development of the history of Ins. as a whole.

Regarding the ins. asso. named in this art., we have in many cases found it impossible to ascertain the dates at which they were estab., and in other cases, if they be still in existence. Some prob. are only agencies, having their chief offices in other countries.

Note.—In reducing *francs* into sterling throughout this paper we have taken 25 fr. as the equivalent of £1 stg.—although in strictness 25 fr. 35 centimes is the value.

Accident Ins.—The practice of Accident Ins. appears to have been authorized in France very soon after it had become an estab. fact in England. It has been mainly called into practice in view of meeting the legal obligations which employers are under to their employees. It has also been called into play in respect of functions usually undertaken by *Friendly Sos.* in the U.K.

1850.—The system of ins. against *gen. accidents* in England was inaugurated on 3 June this year by the *Accidental Death Co.* No. 1.

1852.—By a Decree of Administration promulgated this year, the founding of asso. for individual or "collective" ins. against accidents was permitted. The "collective" idea of ins. for workmen in factories and industrial pursuits for compensation in the event of injury, pervaded this law.

1861.—*La Préserveurice*, a mut. asso. for ins. against accidents, was founded this year in Paris. Its bus. lay very much among the operative classes, to whom it makes a daily allowance in the event of disability to follow occupation, and a sum to the family on death from accident. It now insures against carriage accidents also.

1865.—The *Sécurité Générale* was founded in Paris this year, with a cap. of 2,500,000 fr. (£100,000), in 2500 shares of £40. It bus. was in the first instance confined to individual or collective ins. by the year or the month against temporary or permanent incapacity to work from accidental causes.

The Co. soon made some extension in its bus. programme, and prepared special tariffs, for the ins. of seamen in the navy, and the Sapeurs Pompiers engaged in the fire brigade service—two of the most hazardous occupations known in France.

Yet a little later, and it established a system of ins. for travellers, hunters (sportsmen) and others undertaking hazardous enterprises, by the day.

For its wide departure from the sound principles of accident ins.—which had by this time become very well understood in England; and concerning which the present writer had (on solicitation) advised the Gov. of the late Emperor—the ins. press of France was loud in its praises. Thus:

This Co. has been estab. *scarcely a year, and yet has assured over 20,000 lives.* All its losses, which have not been less than 750, of which 17 were deaths by accident, have been immediately paid. Thus do workmen and masters seek the office with an equal confidence, an equal haste, happy to find a safe and sound medium for averting the chance of litigation and disputes between each other, which are so injurious to their mutual interests and feelings.

The sequel is soon told. In 1866—its first year—the Co. not only expended all its prem. income, but £8053 beyond; in 1867 the cap. was only intrenched upon to the extent of £4527 in add. In 1868 it was thought the income might meet the outgoings. The Co. had already paid 6000 claims, of which it was exceedingly proud!

At the end of 1875, although it had reformed its bus. in many respects, its shares £12 paid up were selling at £6.

1868.—By a law passed 11 July this year, the Gov. of France organized a State system of Life and of Accident Ins., under which the latter occupied a very prominent place. We shall endeavour to present in a condensed form the very crude proposals put forward.

This law provided in its second part a tariff of prems. for ins. an annu. *in the event of an accident encountered in a man's ordinary employment*, being such as to entail permanent incapacity to work; and to give assistance to the widows and infant children of the assured who may be fatally injured by accidents met with in the course of their usual labour.

The fund for the accident branch is distinct from that of the life branch. It consists (1) of a State subvention, forming an annual item in the National Budget. The amount for the first year—1868—was fixed at one million francs, £40,000 stg.; (2) the ann. subs. of the insured; (3) and of gifts and legacies. It partakes, therefore, of a benevolent as well as of a provident character, which is unquestionably erroneous in principle—seeing that ins. of every kind to be permanent should be self-supporting.

To regulate the annuities, accidents are divided into two classes. 1. Accidents which entail a total incapacity to work. 2. Accidents which are followed by a permanent inability to follow the insurer's ordinary occupation. The prem. or subs. at the option of the insured might be 8, 5, or 3 frs. p.a.

The annu. payable to an insured meeting with an accident was fixed on a supposed purchase at 640 times the rate of the prem.—one-half of which to be derived from State subvention. The pensions payable to the insured paying ann. prem. of 5 and 3 frs. were not to be less than 200 and 150 francs, say £8 and £6 respectively.

The assistance to be given, in case of fatal accident, to the widow, or if a bachelor or widower without children, to his parents being 60 years of age, was to be equal to the amount of two years of the pension to which he would have been entitled had he survived. His child or children being minors would be entitled also to the amount of 2 years' annu. These latter benefits to be paid in two equal ann. sums.

These annu. cannot be alienated, neither can they be seized for debt. The insured must be at least 12 years of age; and no person can insure for more than one pension.

The law further provides that all the surplus receipts from the insured were to be invested within 8 days in the *Rentes sur l'Etat* (national debt), that a commission would be appointed to look into all questions connected with these branches of ins., and to report to the Emperor upon the moral and material condition of both; which report to be communicated to the Senate and Corps Legislatif. The Gov. would prepare new T. of mort. derived from experience, and would also prepare an ann. statistical account of the number, nature, and causes of the accidents which may have occurred in the different occupations.

All certificates and documents connected with this branch of ins. were to be gratuitous and free from stamp duty.

By a decree which supplements the law of 1868, many details are arranged. Amongst them is one which provides, that if death results from *suicide, duel, or from judicial condemnation*, the ins. is void.

It also details the mode, which is most complicated, of assessing the pension to be allowed to such sufferers as may by accidents be rendered incapable of following their ordinary occupation, but yet not be disabled from working at some other occupation.

There was no distinction made between the healthful occupation of a rustic labourer with the rare chance of being gored by an ox or kicked by a horse, and a worker in a powder mill or chemical manufactory.

The benefits—or rather life pensions—range from £11 8s. for a boy of 12 years of age paying 8 frs. a year, to a man of 65—beyond which the T. does not extend—who for the same ann. prem. would be entitled, in the event of total incapacity for labour, to very nearly £25 p.a.

Accidents of the second class, that is, such as do not incapacitate the insurers from all sorts of labour, only entitle the sufferer to one-half of the pensions allotted to those totally incapacitated for labour of any kind.

The following are the rates of prem. charged :

T. of ann. prem. to secure the pensions allowed at each age in the event of injury by accident producing total incapacity to work :

Subscription				Subscription				Subscription			
Age.	8	5	3	Age.	8	5	3	Age.	8	5	3
	francs.	francs.	francs.		francs.	francs.	francs.		francs.	francs.	francs.
	fr.	fr.	fr.		fr.	fr.	fr.		fr.	fr.	fr.
12	290	200	150	30	320	200	150	48	401	250	150
13	292	200	150	31	322	202	150	49	408	255	153
14	293	200	150	32	325	203	150	50	417	260	156
15	295	200	150	33	327	205	150	51	425	266	159
16	297	200	150	34	330	206	150	52	433	271	162
17	298	200	150	35	333	208	150	53	442	276	166
18	300	200	150	36	336	210	150	54	452	283	170
19	301	200	150	37	339	212	150	55	462	289	173
20	303	200	150	38	343	214	150	56	473	296	177
21	304	200	150	39	347	217	150	57	485	303	182
22	306	200	150	40	351	219	150	58	497	311	186
23	307	200	150	41	356	222	150	59	510	319	191
24	309	200	150	42	361	226	150	60	525	328	197
25	311	200	150	43	366	229	150	61	541	338	203
26	312	200	150	44	372	233	150	62	560	350	210
27	314	200	150	45	379	237	150	63	579	362	217
28	316	200	150	46	386	241	150	64	600	375	225
29	318	200	150	47	393	246	150	65 & over	624	390	234

In practice the accident asso. of France had settled down into the indemnification of the proprietors of manufacturing estab. for the risks to their workmen during the hours of labour. The charge being from 1 to 4 cents p. man p. day, according to the risks of the occupation. For this the co. insures in the event of non-fatal accident an ann. income varying from 100 to 300 frs. (£4 to £12), according to the prem. paid; and in the event of death 1000 frs. (£40) to the workman's family. The cos. also insure the employers from injuries to the workman which may arise from his neglect, and for which he would otherwise be liable. The amount so insured ranges from 1000 to 7000 frs. (£40 to £280).

During the last few years, however, the bus. has received a much wider application. In 1866 there was founded *La Responsabilité Professionnelle* (accidents to professionals). In 1873 *L'Accident*; 1875, *La Société Protectrice des Familles* (insuring families collectively); and in 1876 a host of cos., viz. *L'Assurance Française*; *Co. Générale d'Assurances*; *Co. Nationale d'Assurances*; *La Fortune Universelle*; *L'Union Industrielle du Nord*. *La Sécurité Générale* was re-organized this year, and is now designated *La Sécurité Générale et la Responsabilité Civil Réunies*. There is also existing *La Sauvegarde des Travailleurs* of Paris and Rouen.

Some further details are given under *Gov. Ins. Projects*. See also *Carriage Ins.*

Agricultural Ins.—Under this head is included in France the ins. against *Floods* [Inundations], *Frost*, *Hail*, and also the ins. of *Live Stock*. We speak of them under this general title in view only of the proposal which follows.

1859.—M. le Hir pub. a pamph.: *On Ins. in France against Hail, Frost, Inundations, and Mort. of Cattle*. Statistics concerning which he had collected with the view of developing a great scheme of mut. ins., to be only partially dependent on the Gov. The orig. documents from which M. Hir obtained his information were filed in the Ministry of Agriculture and Commerce in Paris: having been forwarded by the Prefects of Departments as a guide to the Gov. in the distribution of the succour to be afforded to the agricultural interests suffering from these calamities. He had access to no less than 12,000 statements, extending over the period 1826 to 1858, classified according to departments, arrondissements, cantons, and communes; and showing in each of the 32 years how frequently each commune of France had been afflicted with these scourges, and the total amount of losses experienced.

The necessity of these classes of ins. he considered to be demonstrated by the frightful disasters to which the agricultural interest had been exposed. The mean ann. losses by the four causes enumerated he estimated at 100 millions of francs (£4,000,000 stg.). The ravages by *Hail* alone amounted in 1839 to 117 millions of francs (£4,680,000 stg.), and in 1840, 1846, and 1856, the towns and lands bordering upon the great rivers of France suffered terribly from *Floods*. He proceeds (we follow Mr. Samuel Brown):

The more considerable, the more sudden, the more unequal is the damage caused by such calamities, the more useful and effectual appears the principle of assurance: for it is nothing more than a distribution over a number of years and a multitude of persons, of those heavy losses which may otherwise fall on a single individual in a single year. At the present time none of these classes of ins. are very prevalent in France—some not at all; were it otherwise, ruin would often be averted, and the losses less sensibly felt. Mut. asso. there can be no doubt might be estab., upon a broad and stable basis, by the aid of private inst.; but failing this the Gov. ought unquestionably to meet so great a want. Some ardent economists, however, hasty in innovations, possessing more imagination than experience, have lately urged upon the Gov. the dangerous attempt to undertake all classes of ins., including fire ins.; to render ins. obligatory, and to convert a prem. into a tax. Such a principle requires some consideration.

It will be more convenient to speak of each of the four classes of ins. he mainly treats of under their proper sub-headings in this art., viz.: *Cattle Ins.*, *Flood Ins.*, *Frost Ins.*, and *Hail Ins.*

Amalgamations.—The union of ins. asso. in the sense which the word Amalgamation bears in the U.K. appears almost incompatible with the Laws of France. But the same, or nearly the same end has been accomplished in another manner. Several of the early *Fire* Offices united, prob. by a simple trans. of the pol. as they ran out. The plan now adopted is to place the two cos. desiring to unite under one management, sharing the expenses in proportion to the bulk of their businesses; the funds being kept entirely distinct. Such an arrangement was made between *Le Soleil* and *L'Aigle* about 1845, and was understood to work successfully. In 1875 a like proposal was under consideration in regard to *La Confiance* and *Le Midi*.

Annuities on Lives, etc. (Annuités Viagères).—The French people have shown a greater appreciation of annu., more especially of such as depend upon lives, than any other people in Europe. It would be a matter of great interest to be able to trace minutely the extent of their dealings in this class of investment. We can only deal with the facts that appear on the surface. Their annuity operations have mostly been of a tontine character—it was indeed in France that tontine annu. originated. There appears, strange to say, hardly any annu. asso., such as we have had in the U.K., founded in France. The bus. has been almost entirely carried on by—(1) the French Gov.; (2) the tontine annu. asso.; and (3) the life offices, whose dealings in life annu. have been, and still are, very large. We proceed to review the facts chronologically.

1653.—The first annu. asso. estab. in France is believed to have been founded about this date by Sig. Laurent Tontini, an Italian banker, who settled in Paris this year.

The class of annu. estab. by him in Europe became so popular as still to be designated by the name of their originator—*Tontine annuities*. [TONTINES.]

1759.—A new scheme of *Tontine annuities* was set on foot in France this year, of which details will be developed as we proceed. (See 1770 and 1788.)

1764.—In France a much greater proportion of the Public Debt consists in annu. for lives than in England. According to a memoir presented by the Parl. of Bordeaux to the King this year, the whole Public Debt of France was estimated at twenty hundred million of livres, of which the cap. for which annu. for lives had been granted was supposed to amount to three hundred millions: the seventh part of the whole Public Debt. The annu. themselves were computed to amount to 30 millions a year, the fourth part of 120 millions, the supposed interest of the whole debt at that period.

Adam Smith, when he investigated the subject, arrived at the conclusion that it was not the different degrees of anxiety in the two governments of France and England for the liberation of the public revenue which occasioned this difference in their respective modes of borrowing. It arose altogether from the different views and interests of the lenders.—Vide *Wealth of Nations*, ed. 1846, p. 417.

1770.—The Tontine annu. scheme of 1759 was suppressed by Letters Patent issued this year, but re-appeared in an altered form in 1788.

1781.—M. Deparcieux pub. in Paris: *Traité des Annuités, accompagné de plusieurs Tables très-utiles*.

Same year, M. Carl Chassot de Florencourt pub. at Altenburg, in Germany, a work on Political Economy, written in German, wherein he gave a T. of annu. values computed from *Deparcieux's T. of Mort.*

1788.—The Tontine annu. project of 1759 (which had been repressed in 1770), and which was about this date popularly known as the *Caisse* [or *Tontine*] *Lafarge*, was revived this year under an Arrêt du Roi bearing date 5 April. The title of the project now became the *Chambre d'Accumulation de Capitaux et d'Intérêts composés*. The projectors were now Feuchere, Lafarge, and others. They were expressly forbidden from entering into contracts for any branch of ins. bus. in the sense then understood in France. This limited its range of operations. The political events of this period interfered with its final development; and it comes before us again in 1791 under an altered phase.

1791.—Lafarge's scheme passed through several modifications in the interval since we last spoke of it. It had assumed the title of *Tontine Viagère et d'Amortissement*. But the increasing popularity which had attached to life ins. in consequence of the Arrêt du Roi of 1788 [see sub-heading *Life Ins.*], led to an attempt being made—under the patronage and advocacy of no less distinguished a person than Count de Mirabeau, and notwithstanding the prohibition of 1788—to engraft upon it an extensive Tontine survivorship plan; and indeed it was puffed as combining the advantages of a savings bank and mutual ins. scheme. Its then title was the *Caisse d'Épargne et de Bienfaisance*.

The subsequent hist. of this enterprise it would be very difficult to follow in detail without entering into the political events of the period, outside the scope of our immediate inquiry. The managers of the scheme made promises totally impossible of performance. They even announced that the calculations upon which its operations were stated to be based were approved by the Academy of Sciences—although that illustrious body had actually declared them to be wrong! But the money commenced and continued to come in apace. The accounts showing this large influx of subscriptions were widely pub.—this brought in still more. Finally the cap. raised reached the enormous total of 66 millions of francs—£2,400,000 stg.! A large part of this sum was prob. invested in the national securities. With the collapse of the national finances, the *Caisse Lafarge*—now in derision frequently styled the *Tontine des Immortels*!—also passed out of existence. Its funds were exhausted—a large part of them had indeed been paid back to the subscribers in the shape of undue advantages: so that prob. in any event the scheme would have died of self-consumption.

The events of this period will be further reviewed under sub-heading *Life Ins.*

1809.—The *Civil Code* of France contains several provisions with regard to *Annuities*: thus Art. 1974 enacts that "a contract for an annuity on the life of a person dead the same day on which the contract is signed is void." Art. 1975 extends the same provision to the case of a person affected with a disease of which he dies within 20 days after the passing of the contract. In relation to this last provision a remarkable case occurred in 1809. On the 11th March in that year the Sieur Fried, residing at Strasburg, and aged upwards of 60, sold a large sum in the funds for the purchase of an annuity on his own life. He was at the time of the bargain, and had been for ten years, afflicted with Hemiplegia [a species of paralysis], in consequence of an apoplectic seizure, and he died on the second day after signing the contract, of an attack of apoplexy excited by an alteration. The question then was whether M. Fried, on the day when he signed the papers, was not already under the influence of the disease, to which he fell a victim 30 hours afterwards; or in other words, whether the ten years' hemiplegia and the apoplexy did not constitute one and the same disease? The testimony went to show that M. Fried had for some years been subject to constantly recurring attacks of apoplexy. Some of his servants said his mind had been impaired since the preceding Jan. On the other hand, the notary who

had been employed in the transaction considered his intellect unimpaired. The case was, by order of the Court, submitted to the examination of the Professors of the Faculty of Medicine at Strasburg, and Montpellier; and also to sundry physicians and professors at Paris. As is usual, they differed. The Strasburg physicians were of opinion that Fried was affected of the disease of which he died on the day of signature. Their arguments may be briefly stated as follows: Apoplexy, independent of the symptoms which constitute the attack, has certain precursory symptoms, as well as concomitant and subsequent ones. To the last belong hemiplegia, affected senses, weakness of mind, etc. All, however, are referable to the same cause. Apoplexy may be styled the acute form of the disease, and palsy the chronic; and from the slightest excitement, as passion for example, the chronic will suddenly become acute. They in fact only differ as to the degree of intensity, and hemiplegia always terminates in a fit of apoplexy: it is one of the principal elements of apoplexy. The professors at Montpellier totally rejected the idea of apoplexy and palsy being the acute and chronic forms of the same disease. Paralysis is a consecutive and permanent state; apoplexy a primitive and temporary one. As to paralysis being an element of apoplexy, this would be to suppose that there could be no apoplexy without paralysis, when the contrary is undoubtedly true. And again, paralysis arises from many other causes besides apoplexy. The Parisian Board of Reference agree with those of Montpellier. They observe that palsy consists in a lesion of the nerves of motion and sensation; apoplexy in a suspension or abolition of sense. Hence different organs are necessarily affected in each. There is (they say) no such disease as chronic apoplexy, since death must follow a prolonged attack; but paralysis may occur in three ways, independent of apoplexy: as from compression, section of nerves, etc., as an *avant-courier* of apoplexy, and lastly, and most commonly, as a consequence of it. The professors conclude by giving their opinion—1. That Fried was of sound mind when he made the contract. 2. That he was *predisposed to apoplexy* at the above period. 3. That the fatal disease did not exist at the indicated time, but was excited by an occasional cause, operating on the predisposition. Hence the annuity money sunk could not be recovered by the family of the deceased. The questions here involved were no sooner closed before the legal tribunals than they were transferred to the medical journals of Paris, and indeed of Europe. Many of the best medical works of the period refer to this case, hence we have given this outline of it. Vide Beck's *Medical Jurisprudence*, 7th ed. p. 421.

1822.—The Rep. of the Philanthropic So. of Paris, pub. this year, contained an elaborate scheme for the granting of annu. for old age, the T. commencing at 22, "that being the age at which such young men as have escaped the conscription may, with less sacrifice than at a later period, secure resources for futurity." The subs. were graduated according to increase of age.

1849.—At the close of this year the total number of pol. in the 18 *Tontine* asso. then in operation in France was 395,315; insuring £15,917,443. The total investments £4,988,251; and the income therefrom £230,590. Details are given under sub-heading *Life Ins.*

1853.—An official return up to the end of this year showed that the subs. to the *Tontine annu. and investment* schemes up to this date had reached £7,430,000; and that about £338,000 of *Rentes sur l'Etat* had been purchased since the estab. of these asso.

1856.—Early in the reign of Napoleon III. he made an effort to extend annu. bus. in France. This may have been in view of founding a scheme of National Finance; but we suspect it was rather in view of securing social comfort to the people in their advanced life, as well as of giving as many as possible an interest in settled government. Whatever the motive, there was this year founded in this connexion *La Caisse de Retraites pour la Vieillesse*, wherein life annu. were granted on the basis of *Deparcieux's T.*, with int. at 5 p.c.—the average rate of int. on French investments being only about 4 p.c.; and the payment of the annu. was guaranteed by the Imperial Gov. The scheme was but a repetition of the English Gov. scheme of granting annu. under the *Northampton T.*—except that in regard to the French experiment, if so it may be called, there was full knowledge at the time of its inception.

In 1864 the project underwent some modification.

A very large number of persons purchased these annu.—there are now something like 100,000 annuitants on the books; and the loss to the State treasury has been very considerable.

1859.—The number and amount of annu., immediate, deferred, and survivorship, on the books of the French life offices, as the result of their bus. for 41 years, from 1819 inclusive, was as follows: number of pol. 26,700, ins. ann. payments in the aggregate of £693,600. The number of pure life pol. on the books of the same cos. as the result of trading over the same period was 2384, insuring £450,000!

1868.—In the 50 years' trading of the French life ins. cos., up to this date inclusive, they had issued 52,463 annu. pol. against 11,754 life pol. There were now existing 24,490 annu. pol. insuring aggregate annuities for £656,800; while the existing life pol. were 6320, insuring £1,261,880. So that in the decade the annu. transactions of the life

offices were decreasing, not only in proportion, but absolutely. On the other hand, the annu. trans. of the *Caisse de Retraite pour la Vieillesse* were increasing, and about this date there were 300,000 names on the books.

1876.—It has been determined to test the mort. experience of the annuitants in *La Caisse de Retraites*, not simply as a matter of history in the past, but as a matter of finance in the future. All annu. values will be calculated upon this experience as soon as it is ascertained. (See sub-heading *Mort. Tables*.)

The following is a list of the *Annuity* and of the *Tontine* Asso. of *France*, as founded distinctly for either of these branches of bus. Most of the life offices carry on one or both branches of annu. operations in connexion with their other bus.

Date of Estab.	Name of Association.	Location.	Constitution.	Fate.
1653	Tontine Asso. (by M. Tonti)	Paris	Mutual	Failed.
1788	Chambre d'Accumulation de Capitaux et d'Intérêts Composés	Paris	Mutual	Failed.
1819	Tontine Perpetuelle d'Amortissement	Chartres		
"	Asso. Viagère en Rentes sur l'Etat avec Accroissements fixes et Régénération des Rentes	Paris		
"	Caisse de Survivance d'Accroissement	Paris		
1820	Agence Générale des Placements sur les Fondes Publiques	Paris	{	Became <i>La Prévoyance</i> , 1842.
1821	Caisse Hypothécaire	Paris		
"	Caisse d'Economie et d'Accumulation de Garantie et d'amortissement des dettes	Paris		
"	Tontine de Compensation	Paris		
1838	La Compagnie Royale (authorized to form Tontines, etc.)	Paris		
1841	Caisse Mutuelle d'Economie et de Prévoyance	Paris	{	Authoriza- tion re- voked for abuses.
"	Caisse Paternelle	Paris		
"	La Providence des Enfants	Paris		
1842	La Prévoyance — reformed upon <i>Agence Générale</i> of 1820	Paris		
1843	La Minerve (Tontine Asso. for Department of the Seine)	Paris		
1845	Asso. Tontinières de l'Urbaine	Paris	{	Gov. scheme
1856	La Caisse de retraites	Paris		

Further information regarding the extent of annu. transactions in France will appear under sub-heading *Life Ins.*

Carriage Ins. (*Accidents de Voiture*).—The bus. of insuring carriages against accidental injury, or wilful injury beyond the control of the owner, appears to have originated in *France*. The following are the cos. engaged in the bus.:

Date of estab.	Name of Co.	Location.	Nature of Business.
1830	Seine (La)	Paris	Horses and Carriages.
1864	Prévoyance (La)	Paris	Horses, Waggons, Goods.
1876	Cité (La)	Paris	Horses and Carriages.

La Seine had in 1875 some 110,000 vehicles insured, by about 45,000 pol.-holders; and had paid in claims 6,500,000 fr. or £260,000. *La Prévoyance* insures against injury to waggons and horses, and to the goods carried by the same.

There have been at least 2 other cos. engaged in this bus., viz. *L'Automedon* and *La Celerité*. This latter charged 30 fr. p.a. for carriages with 2 horses; 35 fr. for 3; and 40 fr. for 4. These cos. mostly insure the horses as well as the carriages (*Chevaux et Voitures*). (See *Accident Ins.*)

See general title **CARRIAGE INS.** for further information on this branch of bus.

Cattle Ins.—Under general title **CATTLE INS.** we have shown that ins. of this class were made by individual underwriters as early as 1720 in *Hamburg*. In other parts of the north of Europe it was practised during the last century. *France* appears to have been in advance of the U.K. in this branch of bus.

1839.—This year there was founded at *Tarbes*, the *Compagnie des Pyrénées*, for the ins. of cattle in the Department of the Hautes Pyrénées. This is the first asso. for the ins. of cattle of which we have any record. It appears to have been classed as a "life" co. in *France*, and prob. its promoters had to comply with the requirements incident to the formation of life offices.

1859.—The rates charged by the cattle ins. cos. in France at this date were about 5 fr. for 1000 fr. insured, varying with the character of the animals insured.

Under sub-heading *Agricultural Ins.* we have spoken of the efforts of M. le Hir this year to organize extended mut. ins. asso. for alleviating the losses which agriculturists sustain in the destruction of their live stock by diseases, epidemic or otherwise.

The following is a T. of the Cattle Insurance Associations which have been founded in France:

Date of Estab.	Name of Company.	Locality.	Observations.
1839	Compagnie des Pyrénées	Tarbes	Proprietary.
1840	L'Agriculture	Paris	
1841	Agricole de Lambres	Calais	
1842	Compagnie La ———	Laval	
1843	La Ligerienne Tourangelle	Tours	Cattle, Hail, etc.
"	La Polès	Mer	
1844	La Bucéphale	Paris	
"	La Mutuelle du Calvados	Caen	
1845	La Bonne Foi	Puby	
1846	L'Agricole	Paris	One branch of its bus.
"	La Garantie Fédérale	Paris	Mut. Asso.
"	Trésor de l'Agriculture	?	Cattle, Hail, and Fire.
1855	La Société des Cultivateurs	Coulommiers	Mut. Asso.
1867	Mortalité de l'espèce chevaline	Versailles	Mut. Asso.
1872	L'Union Nationale	Lille	Proprietary Co.
"	La Gironde	Bordeaux	Mut. Asso.
1875	La Patrie Agricole	Paris	Mut. Asso.
1876	Le Comptoir Agricole	Paris	Proprietary.
?	La Glaneuse	Paris	Mut. Asso.
?	La Sécurité	Paris	Mut. Asso.
?	Le Bétail	Paris	Mut. Asso.
?	La Gaule	Bordeaux	Mut. Asso.

We believe most of the asso. named in the earlier portion of this T. have now passed out of existence.

It appears that the bus. of the cattle ins. cos. of France (*Assurances contre la Mortalité du Bétail*) is limited almost entirely to the ins. of larger cattle (*Bétail*) and not to the ins. of sheep, pigs, or goats.

Commercial Credit Cos.—There appears to have been a species of commercial credit ins., as applicable to debtors who removed from one country to another, at a very early date in France [vide *Le Guidon*]. The modern phase of the bus. commenced probably about 1846-8, and of this we have already given many details under general title of COMMERCIAL CREDIT INS. The cos. there spoken of appear to have passed away or changed their identity, and we now find in their stead the following:

Date of Estab.	Name of Company.	Location.	Nature of business.
	Sauvegarde (La)	Paris	Bad debts
	Sauveur du Commerce	Paris	Bad debts
	Société d'Assurance Mutuelle du Commerce	Paris	Bad debts

There was also another company—*La Garantie du Commerce*, which failed a few years since.

1850.—There was published: *A Review and Synopsis of the Mercantile Guarantee Sos. established on the Continent, practically applying the principle of Ins. to Commercial Transactions.*

Conscription, Ins. against.—Asso. for ins. against the conscription, or forced military service—to which all males on attaining a certain age, not physically disabled, are liable—have long been prevalent in France. We assume that they do not fall under the class of ins. cos. requiring State authorization. They seem in fact to be mostly organizations conducted by a few individuals, much after the manner of limited partnerships. Their one purpose is to find suitable substitutes in the event of their members being called upon in ordinary course for service, or being drawn by special ballots in periods of emergency. The substitutes are obtained by means of a money payment. The subs. is small in times of peace, and necessarily large in time of war.

These cos. and their man. are not usually popular: they are regarded as unpatriotic. We shall hope to furnish more details respecting their operations under the general title MILITARY SERVICE, INS. AGAINST.

The following is a list of the offices of this class which have within a recent period been in operation in France :

Date of Estab. of Co.	Name of Company.	Location of Chief Office.	Observations.
1848	Alliance		
1857	Alliance des Familles		
	Avenir (L')		
	Bonne Foi (La)		
	Caisse d'Exonération du Service Militaire		
	Caisse Française d'Exonération		
	Caisse d'Libération		
	Epargne (L')		
	Ordre (L')		
	Protecteur des Familles		
	Sécurité des Familles et la Mutuelle		
	Sentinelles (La)		
	Tresor des Familles		

Expenditure Ins.—A system of ins. having for its object the recoupmnt of all expenditure incurred in regard to articles of consumption, dress, or luxury, has been in operation in France for several years; and it is said to be attended with success. Its mode of operation will be explained in some detail under the title of GENERAL EXPENDITURE INS. in this work.

Explosions, Ins. against.—Ins. against gas and other explosions has been practised in France for some years. Nearly all the F. offices insure against the risk of gas explosion for a small extra prem.

In the prosp. of *La France Mutuelle* (dated some years since) we find the add. rate required to cover "risk of explosion of gas used for purposes of lighting," beyond the ordinary risk of fire, to be: '005 p.c. on houses of the 1st or 2nd class; '010 p.c. on furniture or merchandize in such houses; '015 p.c. on furniture and merchandize in the following occupations: alabaster (dealers in), jewellers, coffee-house keepers, confectioners, glass-dealers, china-men, watch-makers, instruments of music (dealers in), looking-glass (dealers), objects of art, opticians, perfumers, druggists, porcelain, pictures, glass-shop fronts of all trades, workshops and factories.

The following is a list of the associations carrying on this branch of bus.:

Date of Estab.	Name of Co.	Location of Chief Office.	Nature of Business.
1840	Le Nord	Paris	Fire and gas explosions.
1841	Le Prudence	—	Fire and explosions.
1844	La Confiance	—	Fire and explosions.
1857	L'Abeille	Paris	Hail, fire, and explosions.
?	La Centrale	—	Fire and explosions.
?	Le Centre Mutuel	—	Fire and explosions.
?	La Fraternelle Parisienne	Paris	Fire and explosions.

Fire Ins., Hist. and Statistics of.—The Hist. of F. Ins. (*Assurance Incendie*) in France is of very modern date. The offices are of two classes. 1. *Proprietary*, these having their chief seat in Paris, with agencies extending through France and into *Belgium, Switzerland, Spain, Portugal, Algeria, and Egypt*. 2. *Mutual*, much after the manner of the old mutual contribution societies of Gt. Brit. These are mostly located in provincial towns. They have no fixed prem., but receive a deposit at commencement of risk, and make assessments to meet extraordinary losses. The latter asso. are far more numerous than the proprietary or "fixed prem. cos." They are mostly limited to the transaction of one branch of ins., either immovable (*immobilière*), or movable (*mobile*), property. Some accept both. (See 1851.)

The constitution of each of these forms of asso. has been explained in detail in our introductory remarks in the present art.

The practice of the cos. will be treated of under sub-heading *Fire Ins., Practice of*.

1745.—Beckmann, in his *Hist. of Inventions*, etc., says, "The fire office in Paris was estab. in 1745." We believe this to be an error. (See 1754.)

1754.—We have it on the authority of Pothier, that one of the marine ins. cos. of Paris obtained permission from the Gov. of Louis XV. to make ins. against fire this year; but we are informed that the project met with very little encouragement at the time. (See 1816, 1819.)

1788.—The *Compagnie Royale d'Assurances sur la Vie*, which had been organized in the preceding year for the purpose of carrying on the bus. of life ins., was, by an *Arrêt du*

Roi dated 27 July this year, authorized to carry on the bus. of F. ins.—separating the two branches as to capital and bus., but leaving both departments under the control of De Gesmes. Whether the Co. ever transacted any fire ins. does not appear. The project disappeared during the political troubles of the next few years.

1818.—The first co. specially founded in France for carrying on the bus. of F. ins. was: *La Mutuelle de Paris pour les Immeubles*.

1819.—The first proprietary fire ins. co.—*La Compagnie d'Assurances Générales*—was founded this year. The plan and constitution of the Co. were borrowed from England "by a small circle of enlightened men, amongst whom was M. de Gourcuff, the present Man. of the Co." (*vide* Samuel Brown, *Assu. Mag.* vol. i. p. 295).

1836.—The first returns of the sums insured by individual offices in France were for this year, viz. *Royale*, £143,371,120; *Phoenix*, £109,989,000; *Générale*, £92,306,960; *Union*, £50,397,440; *Soleil*, £44,865,520. Total, £440,930,040.

1839.—The 5 fire offices named in 1836 had at this date increased their sums insured to £846,074,912; and 5 other cos. (founded 1837 and 1838) were now actively in the field, viz. *La France*, sum insured, £24,982,111; *Urbaine*, £11,037,192; *Providence*, £6,808,968; *Sécurité*, £6,250,334; *Indemnité*, £4,471,577—total, £53,550,182; which added to the bus. of the 5 earlier offices, made the total sum insured by the proprietary offices amount to £539,625,094. The rate of progress of the 5 oldest cos. had been over 10 p. c. in the 3 years.

1844.—Estimates were made this year by M. le Baron Dupin and M. Boudon of the amount actually insured against fire at this date, as also of the value of property requiring the protection of Fire Ins. 1. The sums actually insured were as follows: In the *proprietary* cos. £785,200,000, producing in prems. £713,200; in the *mutual* asso. (estimated) £240,000,000; prems. unknown, making a total of upwards of 1025 millions stg. in the two classes of offices. The proprietary cos. had become increased to 16, by the estab. of 6 new ones between 1841 and this date. The rate of progress of the 5 oldest cos. during the past 5 years had been upwards of 14 p. c. The prems. received by 14 cos. during this year amounted to £723,168. The losses to £410,697.

2. The value of property requiring the protection of F. Ins. at this date in France was estimated as follows:

28,000 Houses in Paris	£ 112,000,000
6,972,000 Houses in the Departments	1,368,000,000
Risk of Tenants [<i>Fire Ins. Practice</i>]	400,000,000
Ditto of Claims for damage by Neighbours [<i>Fire Ins. Practice</i>]	400,000,000
Furniture, etc., in all France	920,000,000
Merchandise and Materials in various stages of manufacture	5,200,000,000
Proportion of Ins. ceasing every year	200,000,000
Total.....	£ 8,600,000,000

Regarding the last item in the T., which has reference to the practice of the French F. offices, in which risks are taken usually for a term of years, and a certain proportion of the sum insured runs off each year, it is clear that it really has nothing to do with the estimate of insurable property in the aggregate. We, however, give the figures as we find them.

The French F. offices at this date extended their operations into *Belgium, Switzerland, Spain, and Algeria*. But taking their totals from all these sources, it is clear on this estimate that not *one-tenth* of the insurable property was actually insured. The bus. of the cos., however, was very steadily increasing, and the formation of new offices, by directing attention to the subject, appeared to bring an increase of bus. to all the offices. This is almost invariably one of the services rendered by new ins. cos.

1845.—During this year the F. offices experienced some reverses of fortune. The claims were very heavy, and in some instances bore evidence of fraud. One of the cos. resisted a claim; and some other cos. discontinued a number of insurances which the man. regarded as of doubtful character. A clamour was raised, and the aggregate of prems. fell off from £723,168 in 1844, to £692,677 this year; while the losses reached £455,963, against £410,697 in 1844.

The subs. cap. of the 19 fire ins. cos. existing at this date reached an aggregate of nearly £4,000,000, of which 10 p. c. was paid up. Only 6 of the cos. were paying dividends; although 9 others paid int. upon their paid-up cap., as authorized by their stat.

1848.—M. Garnier Pagès, member of the Prov. Gov., and M. Duclerc, Minister of Finance, advanced a proposition that the State should grant F. ins. on all kinds of property—those of buildings and personal movable property to be obligatory; but merchandize, movable property belonging to trade, agricultural and cattle risks to be optional. The cos. were saved from their destined fate by the change of the executive gov. in that fatal year. The fear of a renewal of this attempt, which indeed occurred two years later, had a very depressing influence upon the F. offices; and for the time pretty effectually stayed the formation of any new ones, either in Paris or the provinces.

The scheme of F. ins. proposed by the Gov. of France was based upon the idea of a uniform rate of 1 fr. p. 1000 fr. insured. It was indeed admitted on all hands that if *the whole of the insurable property of France were insured*, the losses would prob. not exceed the rate of 29 centimes p. 1000 fr. (7d. p. £100); and so there would have been a good margin of profit. But without some compulsory measures a great deal of the least combustible property would never be insured; and hence a higher rate must be demanded for that which is insured. (See 1850.)

It was in this year of the Revolution that *La Compagnie Royale* became *La Compagnie Nationale*—no royalty being for the moment tolerated, even in name.

Of the 19 proprietary cos. which had been founded in France up to this date, there were 13 existing. The fate of the others will be shown in a T. at the end of this section of the present art. Many of these also transacted *Life* bus. under distinctly organized departments. Some important particulars regarding share cap., etc., of these cos. will be given under date 1868.

1849.—For this year we have more complete statistics than at any former period as to the 9 leading F. cos. of France. The total sums insured by these cos. during the year reached £921,300,000, the prem. thereon being £797,788, or equal to 1s. 9d. p.c. on the sum insured. The int. and other sources of income reached £31,698. The losses were £383,860, equal to 48.1 p.c. on the prem., or .042 p.c. on the sum insured. The total expenses were £281,756, being 35.3 p.c. on the prem. The total dividends to shareholders £113,200. And the sum of the reserved funds, accumulated out of the profits from the commencement of the respective cos., £360,360, being rather more than 45 p.c. of this year's income from prem.

1850.—Another proposal was made, this time by M. Huguenin, to place the bus. of F. Ins. upon a State basis. A Rep. by Mons. F. Bechard was presented to the National Assembly on the 10th May this year. This Rep. reviewed the attempts which had been made in the direction of compulsory ins. in other countries, as well as France, before this date. It then proceeded to argue against the State system on the grounds of the greater extension given to ins. by the combinations of private interest; the zeal, intelligence, and economy which they bring to bear so much more strongly than governments can expect to do; the injustice which would make the careful and prudent man the victim of the negligent or guilty; the great expenses to which State ins. is liable; besides the heavy prem. which the inclusion of the more dangerous risks would require; and the prob. that instead of being a source of profitable revenue, it would result in loss to the Gov. at any approximation to the usual rate of prem. The Commission unanimously decided that the proposition ought not to be taken into consideration—a recommendation which, after some discussion, was carried in the National Assembly. [DUBROCA, M.]

This was an important year for F. ins. offices in France in other respects. A law passed in Oct. imposed for the first time a duty upon F. ins., viz. 35 centimes upon all then existing pol.; and on all new pol. a duty in respect of the amount insured, and the duration of the pol. More serious impediments were threatened.

Thus it was, about this date, further proposed to levy a tax of 1 centime p. 1000 fr. insured against F., to be applied to the Corps of Pompiers. It was estimated that this would inflict a charge of about £9200 on the proprietary cos., and of £2800 on the mut. offices, together £12,000 p. a. It was calculated that the losses paid by these offices were now about £600,000 p.a.; the average ann. number of losses was 15,000; the amount averaging £40; consequently the tax would add about 16s. to each loss. Then the tax would operate unequally: for while there were 37,000 communes, only 7000 had the advantage of the service of Pompiers.

Some further investigations were entered upon. It was found that in *Paris*, where the houses were nearly all panelled with wood, the fire prem. was only from 15 to 20 cents p. 1000 fr. [4d. to 5d. p. £100]. In *Lyons*, where the houses were mostly built of granite, and with stone staircases up to the top, the prem. was about double; and at *Marseilles*, where the houses were constructed in a similar manner to those at Lyons, but with the add. advantage of the floors being covered with tiles instead of wood, the prem. was as high as 50 cents p. 1000 fr. [1s. p.c.]: the difference in these rates depending entirely on the superior organization of the service of the Pompiers, in the first as compared with the two other cities. The combined reasons urged had weight with the Commission charged to examine the measure, and they decided to reject the proposition.

An investigation into the statistics of the French F. offices this year showed that the proprietary cos. had in a period of 32 years paid 232,241 claims, amounting in the aggregate to £7,922,535. It was believed that the premiums received had reached about £16,000,000.

During the present year the 13 proprietary cos. held ins. in force for £1,038,433,804. The mut. asso. were believed to cover £280,000,000, making a total of £1,318,433,804 insured. The annual prem. £1,120,669. The losses in number 16,470, in amount £565,466, averaging £34 each.

For some add. statistics as to this period, see FIRE INS., HIST. OF, 1850.

1851.—There were existing at this date in France in all 54 F. ins. offices; and

several had previously been amalgamated or wound up. The numbers were made up as follows: 13 proprietary cos.; and 41 mut. asso. Details concerning these will be given in a T. at the end of this section. (See 1866.)

These 41 mut. were all (with one exception, which accepted risks of a special character throughout the whole of France) more or less of a local character, extending their operations over one or several provinces, ranging in some cases up to as many as 28. This year an arrangement was made between the mut. offices by way of combination for re-insurance purposes.

The total sum insured by the whole 54 ins. offices at this date was upwards of £1,300,000,000. The condition of the proprietary cos. showed an improvement upon the previous year.

1852.—The proprietary offices this year insured the large total of £1,026,705,087; and the mut. offices £388,240,000, making together £1,415,000,000 *stg.* The prems. received by the former were £902,478; of the latter there was no return. It should be noted that the return of the *Palladium* was this year omitted from the proprietary offices.

The ratio of prems. to the sum insured had shown very slight variation during this and the two preceding years, being respectively, in 1850, '085; in 1851, '0877; in 1852, '0879 p.c. The losses were, in 1850, 50'18 p.c. of prems.; in 1851, 42'8 p.c. of prems., and '0375 p.c. on sum insured; in 1852, 44'07 p.c. of prems., or '0387 p.c. on sum insured. The expenses had been, in 1850, 37'02 p.c. of prems.; 1851, 37'125 p.c.; and in 1852, very close upon 39 p.c. The total dividends had increased from 12'85 p.c. in 1850, to 15'19 p.c. in 1851, and to 16'63 p.c. of prems. in 1852. The total amount of dividends being £135,800 in 1850, about £150,120 in 1852.

The following T. gives a brief summary of the operations of the proprietary cos. in France for the ten years 1843 to 1852 inclusive:

Sums Insured against Fire in French Proprietary Cos. in each of the Years 1843 to 1852.

Year.	No. of Cos.	Sums insured.	Prems. received in the year.	Loss in the year.	Prems. p.c. on sums insured.	Loss	
						p.c. on sum insured.	p.c. on prem.
1843	11	£ 695,260,639	£ 649,626	£ 291,439	'093	'042	44'8
1844	14	785,480,820	723,168	410,697	'092	'052	56'8
1845	19	861,469,862	692,677	455,963	'080	'053	65'8
1846	12	816,248,039	726,648	466,476	'089	'057	64'2
1847	14	889,628,056	810,868	442,203	'091	'050	54'5
1848	14	928,795,949	841,238	413,137	'091	'044	49'1
1849	9	921,292,646	797,789	383,860	'087	'042	48'1
1850	13	968,873,833	827,497	415,270	'085	'043	50'2
1851	all	1,018,940,556	893,890	382,413	'088	'038	42'8
1852	all	1,026,705,087	902,478	397,696	'088	'039	44'1

As in the above T. the accounts of some of the cos. are wanting, the total amounts insured should be examined in reference to the number of cos. in col. 2, otherwise it appears that the total amount of ins. has diminished in some of the years, which would not be true except as to the year 1845, under the circumstances already explained.

1855.—The sums ins. by the proprietary and mut. F. offices together at the close of this year were estimated to have reached 43 milliards of frs., or £1,720,000,000. The average prem., including all kinds of risks, as theatres, manufactories, houses of wood, thatched houses, furniture, and combustible and inflammable stores generally, was 84 cents p. 1000 frs. (or 1s. 8d. per £100)—ranging from 97 cents p. 1000 frs. in the proprietary offices down to 50 cents in the mutuels. In the U.K. at this date the rate was about 4s. p. £100 ins. on an average. The lowness of the rate in France is mainly due to the fact of the properties being insured several times over. (See 1857.)

On the whole it was considered that the cost of F. ins. was now so low in France as to render Gov. interference altogether unnecessary.

1856.—Early in this year the Paris F. office *La France* opened an agency in Lond., in view of competing for bus. with the Brit. offices, which they could readily do in one respect—they being free from the *per-centage* duty, which was then such an onerous burden upon F. ins. in the U.K. By the Act 19 & 20 Vict. c. 22 (1856), ins. of property in the U.K. effected by foreign offices were made liable to the duty. This stopped the threatened invasion. [FIRE INS., HISTORY OF.]

1857.—Mr. Samuel Brown read before the Statistical So. of Lond. a paper: *On the Progress of F. Ins. in Gr. Brit. as compared with other Countries* [Statist. Journ. vol. xx. p. 135], wherein he says (p. 144):

The amount of F. ins. in Gr. Brit., though it may appear large to those to whom the subject is presented for the first time, sinks into comparative insignificance when contrasted with the totals insured in France, especially when we consider that in the former country the system has been known for more than 180 years, and that in the latter it was only introduced about 40 years ago. The first

company regularly estab. in France, *La Mutuelle de Paris pour les Immeubles*, only dates from 1816; and the first proprietary company, *La Compagnie d'Assurances Générales*, from 1810. The plan and constitution of the latter was professedly founded on the model of the English companies. The total amount insured in the *Sun*, the largest English co., exceeded, according to the duty returns, £140,442,000 in 1855, exclusive of foreign ins.; but in the same year, after 35 years' existence, the ins. in the *Nationale*, estab. only in 1820, amounted to upwards of £203,000,000, after deducting re-assu. In 1836 there were but 5 proprietary cos. existing in France, at which time the insurances therein amounted to £440,930,040. In 1837 and 1838 five new cos. were founded, and their new bus., combined with the increasing bus. of the old, showed in 1839 a total of £539,625,094, being an increase in 3 years of 22½ p.c. Between 1839 and 1844 6 new cos. were added to the list, and at the latter date the sums insured in 14 out of the 16 cos. amounted to £785,480,819, being an increase in 5 years on the previous amount of 45½ p.c.

It would be very interesting to know in what degree the especial risks attaching to F. ins. in France, viz. *le risque locatif* and *le recours des voisins* [for definitions of which see sub-heading *F. Ins. Practice*, in this art.], influence the growth of the ins. totals. It is known that the property in cities and towns is insured several times over—each occupier having the like liability in regard to all his neighbours. We have heard it asserted that in dense parts of cities property has been found insured as many as 7 times.

1863.—Mr. Geo. Coode issued his *Revised Rep. on Fire Ins. Duties* [in England], and therein he discusses the rapid growth of F. ins. in France, and the causes which had led to it. These he considered to be: 1. The adaptation of ins. to the small risks of that country. 2. To the operation of the law of France regarding liability to neighbours (already referred to, 1857). 3. Perhaps to the operation of *average*, which tended to cheapen the prem.

1866.—At this date there were 5 mut. ins. asso. in Paris. These had insurances on their books amounting to £269,576,021. There were also 30 other mut. offices through France: making a total of 35 mutuals against 41 in 1851. Here is the list, with such limited information as we are able to gather concerning them:

Mutual Fire Offices in France, 1866.

Name of Co.	Location.	Amount at Risk.	Claims Paid.
		£	£
La Mutuelle Immobilière	Paris	128,026,880	12892
Assurance Mutuelle	Paris	73,282,034	8084
La Fraternelle Parisienne	Paris	32,540,675	4946
Le Centre Mutuel	Paris	32,433,384	12675
L'Europe	Paris	3,293,049	....
La Mutuelle de Loire et Cher	Blois	10,692,562	2856
La Mutuelle du Cher	Bourges	2,242,546	210
La Sauvegarde	Bordeaux	7,018,149	970
La Mutuelle der Calvados de l'Orme et de la Manche	Caen	31,567,437	9493
La Caennaise	Caen	12,347,107	5817
L'Auvergne	Caen	3,907,660	469
La Mutuelle de la Marne	Chalons-sur-Marne	5,101,438	2028
La Mutuelle d'Eure et Loire	Chartres	4,497,047	3308
La Mutuelle	Chateauroux	5,142,076	1244
La Mutuelle Mobilière	Le Mans	20,804,569	2773
L'Economie	Limoges	6,516,817	3986
La Mutuelle Immobilière de Lyons	Lyons	7,422,429	445
La Mutuelle Immobilière de la Marne	Melun	11,922,472	2502
La Mutuelle Mobilière de Seine et Marne	Melun	4,383,624	3441
La Messine	Metz	2,302,212	22
La Mutuelle de Marseille	Marseilles	4,339,292	202
Immobilière de l'Allier	Moulins	5,225,032	1831
La Mutuelle Immobilière du Haut Rhin	Mulhouse	4,487,307	5999
La Mulhousienne	Mulhouse	7,824,118	8621
La Nantaise Immobilière	Nantes	5,084,057	202
L'Orléanaise	Orleans	10,219,329	4301
La Mutuelle de Poitiers	Poitiers	27,068,466	4410
L'Ancienne Mutuelle de Rouen	Rouen	74,819,402	22158
La Rouennaise	Rouen	25,371,448	13005
La Clémentine	Rouen	11,947,732	23773
La Normandie	Rouen	26,399,607	7755
La Mutuelle du Bas Rhin	Strasbourg	2,777,230	2210
La Mutuelle d'Indre et Loire	Tours	9,385,356	793
La Mutuelle de Valence	Valence	12,593,839	5620
La Versailleaise	Versailles	2,398,824	98

1868.—The details contained in the following T. will be of interest here, and will bring into connexion some of the incidents already noted.
POSITION OF THE LEADING FRENCH FIRE INSURANCE COS. AT END OF 1868.

Date of Estab.	Name of Company.	Capital,	No. of Shares.	Amount of Shares.	Paid up.	Quoted Value.	Sums Insured.	Renewal Premiums, 1868.	New Premiums, 1868.	Total after deducting Cautions and Re-insurance, 1868.	Claims Paid in 1868.	Reserve Fund.	Consecutive Number.
1818	Générales	£ 80,000	400	£ 200	£ 200	2000	£ 438,500,917	£ 308,571	86,811	£ 340,529	£ 187,283	£ 293,400	1
1819	La Nationale	400,000	2000	200	40	400	364,456,215	243,893	57,709	252,967	131,386	120,000	2
"	Phénix	160,000	4000	40	40	124	361,561,804	274,086	65,298	281,368	168,045	80,000	3
1828	L'Union	400,000	2000	200	40	280	259,371,707	192,271	55,807	194,726	110,896	54,600	4
1829	Soleil	240,000	1000	200	40	360	249,285,653	174,426	46,782	193,304	126,173	54,600	5
1837	La France	400,000	2000	200	40	220	232,964,708	167,782	53,555	164,950	147,361	155,648	6
1838	L'Urbaire	200,000	1000	200	40	236	183,488,115	155,385	43,721	159,048	94,817	65,028	7
"	Providence	200,000	1000	100	20	140	134,089,734	113,866	23,077	105,483	45,427	69,440	8
1840	Nord	80,000	2000	40	8	44	94,105,377	93,797	27,630	77,098	39,483	74,400	9
1843	Aigle	80,000	400	200	80	200	119,279,345	88,436	27,828	97,037	60,205	34,119	10
"	Paternelle	240,000	6000	40	16	44	168,114,935	129,657	30,192	125,813	60,398	32,887	11
1844	Confiance	240,000	1200	200	60	200	125,162,967	96,667	26,885	94,919	65,452	12,474	12
1857	Abbeille	480,000	12000	40	8	40	91,986,257	85,976	22,750	93,460	60,098	.....	13
1858	Caisse Générale	480,000	12000	40	12	36	90,308,582	86,779	36,536	102,325	69,609	.....	14
1859	Midl	80,000	400	200	40	200	38,554,569	45,769	19,104	37,062	25,694	.....	15
1863	Centrale	200,000	1000	200	60	200	49,271,929	38,085	21,752	41,990	31,469	.....	16
1864	Monde	200,000	10000	20	6	20	45,197,433	26,899	19,357	36,642	47,041	.....	17
1867	Union du Nord	80,000	1000	80	20	20	29,892,896	16,651	11,705	24,374	12,737	.....	18
1868	La Paix	200,000	1000	200	60	60	.....	.....	.....	.....	.....	.....	19
1869	La Patrie	40,000	1000	40	10	10	16,159,893	9,484	7,247	15,849	8,332	.....	20
	Totals	4,480,000	.....	.....	.....	.....	.....	2,349,320	683,746	2,438,043	1,461,906	991,996	21

1871.—The war over, large add. of taxation became urgent, and ins. cos. were again selected. (See 1850.) A duty was imposed upon F. ins. equal to 8 p.c. on the prem.

The opposition which the F. Cos. were induced to offer to this measure, in its various stages through the National Assembly, led to the formation of the "Syndicat des Compagnies d'Assurances à primes fixes contre l'incendie," which was intended to be rendered a permanent organization, after the manner of the Tarif Asso. among the British Offices. The first president was M. Cloquonin. The Syndicat, as such, did not last long; but the leading offices (except the *Soleil*) still act together as a committee for purposes of rating and self-defence.

1878.—The 20 proprietary cos. of *France* insured during this year the total sum of £2,949,667,816. The incomes from all sources reached £2,916,862. The claims were 46.02 p.c. of the premiums. The nominal cap. employed in the bus. reached £4,640,000. The reserved funds of the cos. amounted to £2,154,440.

The 10 largest mut. offices insured during the year £441,686,451. The amount of their losses was not stated in any complete form.

1874.—The sums insured by the 22 proprietary F. companies this year reached £3,138,514,938. The prems. thereon reached £2,852,326. The losses were 48'63 p.c. of premiums. The 2 new cos. since 1868 were *La Nation* and *Le Comptoir Générale des Assurances*.

We have for the first time a return of the bus. transacted by 2 of the French F. Re-ins. Cos. The estab. of F. offices solely for the bus. of re-ins. F. risks had for many years been prevalent in France (as in several other Continental countries), but the returns of their bus. were not generally pub. The returns now presented are as follows:

La Ré-assurance prems. £ 95,526 Losses paid and unpaid, £84,854
La Caisse Générale des Ré-assurances " £110,909 " " £66,473

The cap. of each of these cos. is £200,000; that of the first in 1000 shares of £200, £40 paid; that of the latter in 5000 shares of £40, £8 paid. The shares of the first-named co. are represented as being at par; those of the latter at a discount of £6 p. share.

1875.—The returns of 24 proprietary fire offices—the two new ones being *Le Globe* and *La Caisse Méridionale*—for this year give the following results, after deducting all re-insurances:—Risks in force 31 Dec. £3,189,510,484; prems. thereon, £3,065,861; interest received, £173,865; prems. and interest, £3,239,546. Losses, £1,326,211. Credit balance of profit and loss, £725,427; reserve funds aggregate (5 cos. having none), £2,338,782.

The progress on the year was: Risks in force, £50,995,630; prem. receipts, £213,533. Losses, decrease, £60,890. Reserved funds, increase, £142,166.

Of the £3,239,546 received for prems. and int., the sum of £1,771,170 was absorbed by dividends to shareholders, commission to agents, and management expenses. The losses were 44 centimes p. fr. of prem. receipts.

We have no fresh returns of the mut. offices.

During the past 10 years various ins. cos. have been founded in Eng. in view mainly of carrying on bus. in France. These will be spoken of under sub-heading *Foreign Ins. Cos.*

1876.—The *Refinery Mut. F. Ins. Asso.* was founded this year in *Paris*, at the instance of the sugar-refiners, and in consequence of an increase of the rates for these risks by the other offices. There are very few "class offices" in France; and the founding of this office, under these circumstances, calls to mind the events of 1782 in Eng.

Chronological T. of the Fire Ins. Asso. founded in France; in two parts.

Part I.—PROPRIETARY COS.

Date.	Name.	Location.	History and Observations.
1819	Générales	Paris	Existing.
"	Phénix	Ditto	Existing.
1820	Royale	Ditto	Existing; became <i>Nationale</i> .
1828	Union	Ditto	Existing.
1829	Soleil	Ditto	Existing.
1837	France	Ditto	Existing.
1838	Urbaine	Ditto	Existing.
"	Sécurité	Ditto	Amalg. with <i>La France</i> .
"	Indemnité	Ditto	Amalg. with <i>L'Urbaine</i> .
"	Providence	Ditto	Existing.
1839	Lyonnaise	Lyons	Amalg. with <i>La Palladium</i> .
1840	Nord	Paris	Existing; with small bus.
1841	Palladium	Ditto	Amalg.
1842	Sauveur	Ditto	Passed out of existence.
1843	Aigle	Ditto	Existing.
"	Reparatrice	Ditto	Passed out of existence.
"	Paternelle	Ditto	Existing.
1844	Confiance	Ditto	Existing.
1845	Bienfaisante	Ditto	Amalg. with <i>L'Urbaine</i> .
1854	Midi	Ditto	Existing.
1857	L'Abeille	Ditto	Existing; founded at Dijon.
1858	Caisse Assu. Agricoles	Ditto	Existing.
1863	Centrale	Ditto	Existing.
1864	Monde	Ditto	Existing.
1867	Union Gén. du Nord	Lille	Existing.
1868	Paix	Paris	Existing.
1869	Patrie	Paris	Existing.
1870	Garantie Générale	Paris	Existing.
?	Concorde Européenne	Paris	Ceased to exist.
1872	Nation	Paris	Existing.
"	Comptoir Général	Paris	Existing.

Date.	Name.	Location.	History and Observations.
1873	Caisse Méridionale	Toulouse	Existing.
1874	Globe	Paris	Existing.
"	Le Salut	Paris	Existing.
"	Univers	Paris	Existing.
1875	L'Ouest	Nantes	Existing.
"	Société Française	Paris	Existing.
1876	Renaissance	Paris	Existing.

Part II.—MUTUAL ASSO.

Date.	Name.	Location.	Nature of Business.
1816	Société de Paris	Paris	Immovable property.
1818	Mutuel de Rouen (ancien)	Paris & Rouen	Movable & Immovable.
1819	La Nantaise	Nantes	Do. Do.
"	Société de Seine-et-Marne	Melun	Immovable property.
"	" de Seine-et-Oise	Paris	Ditto
"	" de Lyon	Lyons	Ditto
"	" de d'Eure-et-Loir	Chartres	Ditto
1820	" du Bas-Rhin	Strasbourg	Ditto
"	" d'Ancienne Mut.	Caen	Ditto
"	" d'Orléanaise	Orléans	Ditto
"	" la Messine	Metz	Ditto
"	" de Mutuelle du Cher	Bourges	Ditto
"	" du Haut-Rhin	Mulhouse	Movable & Immovable.
1821	" de Mutuelle de la Marne	Chalons - sur - Marne	Immovable property.
1824	" la Mutuelle	Versailles	Ditto
1825	" Mutuelle de l'Allier	Moulins	Ditto
1826	" Assurance Mutuelle	Marseilles	Ditto
"	" d'Indre-et-Loire	Tours	Ditto
"	" de Valence	Valence	Movable & Immovable.
1828	" de Lille	Lille	Immovable property.
"	" de Mans	Le Mans	Ditto
1829	" la Mut. de l'Indre	Chateauroux	Ditto
1834	" de Clermont Ferraud	Clerm. Ferr.	Movable & Immovable.
1837	" la Rouennaise	Rouen	Ditto Ditto
"	" le Parisienne	Paris	Movable prop. only.
1838	" la Fraternelle	Paris	Ditto
"	" la Caennaise	Caen	Ditto
"	" de Loire-et-Cher	Blois	Movable & Immovable.
"	" le Mut. de Poitiers	Poitiers	Ditto Ditto
1839	" l'Auvergne	Clermont Fer-	Ditto Ditto
1840	" la Clémentine	Rouen [raud	Ditto Ditto
"	" la Normandie	Rouen	Ditto Ditto
1841	" l'Economie	Limoges	Ditto Ditto
"	" la Prudence	Paris	Ditto Ditto
1842	" la Sauvogarde	Bordeaux	Ditto Ditto
"	" la Bretagne	Nantes	Ditto Ditto
"	" Mut. Mobilière du Mans	Le Mans	Movable prop. only.
1843	" la Neustrie	Caen	Immovable property.
1845	" la Nivernoise	Nivers	Movable & Immovable.
1849	" la Garantie	Paris	Ditto Ditto
"	" l'Union tutélaire	Paris	Ditto Ditto
"	" l'Aquitaine	Agen	Ditto Ditto
"	" la Banlieue	Paris	Ditto Ditto
1853	" le Centre	Paris	Ditto Ditto
"	" le Trésor de l'Agriculture	Paris	
1860	" l'Europe	Paris	Ditto Ditto
?	" la Caisse départementale des Ardennes	Mezieres	
?	" la Caisse départementale de la Meuse	Bar-le-Duc	
1873	" la Fourmisiennne	Fourmies (Nord)	
"	" la Fabrique de Sucre	Paris	
1876	" la Raffinerie	Paris	

1877.—There were at the commencement of this year 28 proprietary, and 42 mut. F. offices existing in France, with 25 agencies of F. offices belonging to other countries [*Foreign Ins. Cos. Trading in France*]: total 95. There were in add. a number of re-insurance offices in operation, of which two belonged to France.

Fire Ins., Practice of.—The practice of fire ins. in France differs very materially from its practice in the U.K., or the U.S. The variations are in part occasioned by differences in the law, which we shall first explain; but the different habits of the people have much to do with it. We propose to illustrate the practice by examples, as being far more effective than mere description.

Civil Code.—The following are the provisions of the *Civil Code*, as bearing upon the risks of tenants (*Le risque locatif*):

Art. 1733.—The tenant must answer for a fire, unless he can prove that it happened by accident, or superior force [*FORCE MAJEURE*], or by fault of construction, or that the fire has communicated from an adjoining house.

Art. 1734.—If there are several tenants, all are fully responsible for the fire, unless they can prove that the fire commenced in the dwelling part of any one of them, in which case he alone shall be held liable. Or unless some can prove that it was not possible that the fire could commence in their portion of the dwelling, in which case they shall be exempt.

The ins. offices indemnify tenants from the responsibility attached by these two articles—

1. If the building be *not* ins. by the office, for a prem. at the rate of half that required for the building itself.
2. If the building be ins. by the office, then at the rate of one-third the prem. during the continuance of the ins.

See sub-heading *Tenant's Responsibility*.

Then there are the risks incident to indemnification of neighbours (*Le recours des voisins*). The clauses relating to this in the *Civil Code* are:

Art. 1382.—The consequences of any act which causes damage to another must be repaired by him through whose fault it has been caused.

Art. 1383.—Every one is responsible for the damage he has caused, not only by his own act, but by his imprudence or negligence.

By the terms of these articles, the proprietor or the tenant, from whose dwelling the fire is communicated, is liable to indemnify his neighbours, who may have suffered loss by the extension of the fire.

The office guarantees the effects of this indemnification for a quarter of the rates demanded for the house ins., or the neighbouring dwelling. See sub-heading *Neighbour's Responsibility*.

By the common law of England the liability is not dissimilar in principle from the above; but it has been modified by stat. so as to exempt the consequences of fires arising from accident. In practice there are no ins. analogous to either of these classes in the U.K. Either landlord or tenant may insure the rent in the event of fire, during the progress of rebuilding. And from time to time fire offices in the U.K. have undertaken the ins. of trade profits. [FIRES FROM ACCIDENT.] [FIRES FROM NEGLIGENCE.]

Classification of Risks.—The classification of risks adopted by the French F. offices has been given under the general title FIRE INS., CLASSIFICATION OF RISKS IN.

Conditions of Ins.—The conditions or regulations of F. Ins. are much more elaborate than in the Brit. F. pol. These have already been set out in detail under general title of FIRE INS. POL., where the French pol. is given complete.

It is necessary to bear in mind here that all F. pol. in France are subject to *average*.

The French F. pol. also contain the *Co-insurance* clause, which is usually as follows:

If at the time of the fire, the value of the objects covered by the pol. is found to exceed the sum total of the ins., the insured is considered as having remained his own insurer for that excess; and he is to bear in that character his proportion of the loss.

Under this clause the *surplus* over the ins. alone contributes; while under the *average* clause the *whole* property is brought into contribution, with the portion insured.

Description of Property Insured.—The following case came before the Court of Appeals at Dijon, 1872. It arose out of an action brought against the F. Ins. Co. *Le Soleil*. The Co. required as one of its terms a statement of the use, character, and construction of the building or buildings insured, and the position in which they stood in respect to each other. It was provided in the pol. which they issued that any concealment or false statement as to any of these particulars would render the pol. void, and exonerate the insurer in case of loss. The Court of Appeals held that, the contract of ins. being abatory, the statement of facts, above mentioned, was a substantial part of the contract. These requirements are not in derogation of the general principles of law. Similar requirements are made in marine ins. In this case the insured obtained on the 12th of Jan. 1870, a pol. on 5 buildings which adjoined each other. They were described as being constructed of stone with the exception of No. 5, which was described as being covered with straw. It was not stated in the description that the buildings were connected together by any internal communications. The fire occurred on the 23rd of March, 1871. It then appeared that, contrary to the statement in the description,

building No. 4 was covered with straw, and that the buildings insured were all connected together by various internal communications. The basis on which the Co. estimated its premis. was, therefore, erroneous, and the contract was thereby null and void. It was alleged, on behalf of the plaintiff, that the description of the property was reduced to writing by the Co.'s own agent; and that if the facts were not correctly stated in it, it was the agent's own fault, but no proof was given of this allegation. The Court of Appeals held, that the subject-matter of the ins. being single, the contract was indivisible, and being void in part was wholly void.

Fire Extinguishment.—In the cities and towns of France there are no firemen or fire brigades, as such. The *Sapeurs Pompiers*—the Sappers and Miners—are the firemen, when on home duty, in whatever town they may be. In Paris there are usually from 700 to 1200 Sapeurs Pompiers on home duty. They have a large central station in that city. The fire engines are small, but very numerous. The modern houses are built very much on the fireproof principle, with thick party-walls, carried high up, and guarded well as to flues and openings. As a consequence fires very rarely spread from house to house, except in the narrow streets to opposite houses. All the new streets have been made very wide, partly for military purposes. The organization for fire protection is purely military. See sub-heading *Fireproof Buildings*.

Fire Inquests.—In the ordinary course every fire is followed by an official inquiry into its origin, and all the attendant circumstances; but where the facts are apparent, or easily traceable, or where it arises from the admitted carelessness of the *concierge*, the inquiry may be dispensed with.

Fireproof Buildings.—For some years past the tendency in France has been to erect buildings on the fireproof principle, more especially in the cities and the larger towns. The legal responsibilities of tenants and owners has operated in this direction. The principle of living in "flats," by which each family is entirely shut off from all others in the same building, has had a tendency in the same direction. Napoleon III. and his chief, Baron Haussmann, set the example as to Paris, and other cities followed. In nearly all modern buildings which have not stone fronts with brick side walls, and iron and brick-arched floors, with roofs of similar construction, the spaces between wooden joists are carefully filled with concrete or gypsum, plaster of Paris (when in the anhydrous state), and supported on tile, gypsum, or such like ceilings, upon which latter is laid a thick coating, plain or ornamental, of the universal plaster of Paris. The floors are generally laid in thin marble or encaustic tiles, imbedded in cement, resting on such filling and joists; occasionally, there are wood floors, with iron joists and imbedded wooden sleepers. All partitions, where not of brick, are also filled with concrete or gypsum. The stairways are of stone or iron, and the spaces between purlins and rafters supporting slate, copper, iron, or tin roofs, are also carefully filled in as the partitions. There are no draughts or wooden flues to convey fire from story to story. The result of the system, but semi-fireproof in detail, is, that Paris is not only fireproof as a whole, but fireproof in respect to any large section of it. [FLUES.]

Gas Explosions.—These are excluded from ordinary pol., or made subject to an extra charge of 5 cents p. 1000 frs. on buildings, and 15 cents on furniture. See *Premis*.

Lightning.—Risk of damage from fire occasioned by lightning is not included under ordinary fire pol. The charge is 10 cents p. 1000 frs. See *Premiums*.

Neighbour's Responsibility.—The following point in practice arose in 1867:

As between landlord and tenant, the legal presumption in France is that the destruction of property by fire is caused by the negligence of the tenant thereof, upon whom is thereby cast the burden of proving his innocence. But as between two neighbours, there is no such presumption in law. Therefore, where the evidence only proved that a fire originated in the premises of A. and was communicated to the property of B., and there was no affirmative evidence of A.'s negligence, A. was held by the Imperial Court not to be responsible for the loss sustained by B.—*Law Journal*, 18 Oct.

As an instance of the complications which sometimes arise regarding liability to neighbours, the following case before the Civil Tribunal of Limoges, 1873, may be taken as an example: On the 7th of June, 1870, at Limoges, a fire took place in a grocery kept by a Madame Sègue, and spread to neighbouring houses. The fire was caused by the carelessness of Madame Sègue, who lit a candle near a vessel containing petroleum in order to serve a customer with a small quantity. The Sègues husband and wife were insured in *La Confiance* Ins. Co., which became debtor to them for the indemnity due them for their personal property consumed. Their neighbours were insured in *L'Abeille* Ins. Co., which made good the damages they had suffered, and for which they had brought claims, but the Co. sought to recover the amount from the Sègues. *L'Abeille* levied upon the sum due and already assigned the Sègues by *La Confiance*. According to the double judgment of the Civil Tribunal of Limoges, it was held, that the husband is not legally responsible for the acts of his wife in a matter of trade in grocery conducted exclusively by herself on her own responsibility, and in this case the licence was taken out and the goods bought in the name of Mme. Sègue. For this reason the claim of *L'Abeille* was declared unfounded, and the execution replevied. In appealing from this decision, the advocate of *L'Abeille* contended that the debts that the wife contracted in carrying on

a trade authorized by her husband, bound him, provided that there existed community between them. In the case in point the wife pursued the bus. with the husband's full consent and cognizance; the community between them was admitted, and he was therefore responsible. The Court to which the appeal was carried *held*, that although responsibility attached to the husband as far as there existed a community of goods and interest between him and his wife, it could be computed only to acts involved in this community, from which the unintentional offence committed by the dame Sègue was wholly estranged, as she was at the time of the accident performing a function belonging to her own exclusive business, which her husband in no way directed or controlled, for the trade in question was transacted solely by the wife in her name and by her purchases, credit and labour, so that the result of the appeal was the confirmation of the principles, doctrine, and decision of the lower court.

Policy (Contract).—The form of fire ins. pol. in use in France has been given in our art. FIRE INS. POL. It differs as regards form from those of Gt. Brit. or the U.S. The conditions and stipulations form part of the body of the pol., and precede the written description of the property insured. The contract is one of reciprocity, and the insured must sign the conditions before the contract is completed. The rights of the co. are usually very clearly defined. The pol. usually runs for 10 years; but the prems. are payable *annually*. The pol. constitutes a lien on the property for the prems. The conditions of the pol. are framed with great regard to the collection of the prems. by the co. See sub-heading *Premis., Payment of*. The commission to the agent is frequently as much as 2 years' full prems. on completion of contract; no commission on renewals, these being payable at the head office.

Premiums.—The prems. for fire ins. may be said to vary in all the Departments of France. In *Paris* dwelling-houses in a good locality may be ins. at the normal rate of 4 cents p. 1000 fr.; but then add. charge is made against fire from explosion of gas of 5 cents on buildings and 15 on furniture. From fire by lightning 10 cents add., and for risks of destruction from war 1 fr. p. 1000 fr. Again, buildings having steam boilers are charged an extra of from 5 to 10 cents. There is thus a system of "schedule rating" in force, and the property being, as we have seen, insured 5 or 6 times over, viz. by each occupier, and prob. by each neighbour, the rate is brought up very nearly to what it is for first-class risks in London.

The prems. in 1875 (including the heavy charges to which they are now subjected by way of taxation) amounted to 98 centimes p. 1000 fr. of property ins.—equal to about 2s. 1d. p. £100 insured.

Premiums, Payment of.—Fire ins. contracts in *France* are almost invariably made for a term of years—sometimes 7, but usually 10. And the contract is so shaped as to enforce payment in a very summary manner, as by distraint. The following important case arose in practice in 1874.

A co-partnership, doing business in Paris, under the firm-name of Bourgeois Brothers, effected ins. for a definite term of years with a co. called *Trésor de l'Agriculture*. During the first two years of the term the firm discharged punctually its obligations for the payment of its prems. At the end of that time, a great variety of rumours having been put in circulation in regard to the solvency of the Co., the insured ceased the payment of their prems. They stated that, in view of the apparently unsound condition of the Co., they did not consider the contract of ins. as any longer binding upon them, and that they felt themselves compelled to cancel it. They said that they would not pay any more prems. until the solvency of the Co. had been estab. by an adjudication. The Co. thereupon brought an action upon the pol. against the insured for the recovery of the prems. which had become due. Judgment was given in favour of the Co. It was *held*, that it was not competent for a pol.-holder to discontinue the payment of prems. called for by the terms of his contract, upon the ground that the Co. was insolvent, until the fact of the insolvency had been ascertained by the adjudication of some court; that the personal opinion of a party insured that an ins. co. had become insolvent was not, in itself, enough to enable the insured, at his own option, to put an end to the contract. It was further *held* that, even if the insured was in a position to be able to prove that the Co.'s mode of doing bus. was irregular, or even that illegal acts had been committed by it, the insured must institute legal proceedings against the Co., and could not take advantage of these irregularities as a justification for the non-payment of prems. As long as the contract continued in force, the prems. must be paid.

Re-insurance.—The per-centage of current ann. fire prems. required for re-insurance is estimated in France at from 30 to 33 p.c.

Tenant's Responsibility.—We have seen that under the provisions of the Civil Code the occupier of a house wherein a fire occurs is liable to all the co-tenants in the same building, as also to the opposite neighbours, and all those whom the fire may reach, for any damage occasioned—the amount, however, is limited to 14 times his ann. rental. He is equally liable for the consequences of a fire caused by the carelessness or imprudence of any of his employees in the discharging of any duty in which he may be engaged. In practice all occupiers insure against the full measure of their liability; and the ins. offices interested adjust the obligations of all parties concerned.

The tenant or occupier is also responsible to his landlord for all damage by fire, unless he can prove that it was produced by a cause purely accidental or irresistible in force [FORCE MAJEUR], or by defect in construction. *The burden of furnishing this proof rests upon the occupant, and it must be a positive proof, not merely showing the possibility or the presumption of the accidental or unavoidable cause of the fire, but the complete and absolute impossibility that it could have had another origin.*

The following cases are in point ;

The application of the principle of tenant's liability is illustrated by the case of the Ins. Co. *L'Abeille v. Morin*, reported in the *Journal des Assurances*, 1874. A fire destroyed, on May 11, 1872, the buildings which this Morin had leased from M. Martigny, and *L'Abeille* indemnified the proprietor, Martigny, for the loss, in the sum of 6466 fr. 25c. The Co. being subrogated to his rights, sued Morin for the amount paid Martigny. The Civil Tribunal of Niort decided adversely to *L'Abeille*, and the Co. carried the case to the Court of Appeal at Poitiers, which reversed the decision of the lower court, holding that it was incumbent on the lessee, in order to relieve himself of responsibility for the fire, *to furnish proof positive, based on demonstrated facts, excluding all doubt as to the origin of the fire, or any uncertainty as to its cause by any fault or negligence on the part of the lessee.* It was therefore considered vain for Morin to prove, as he had done, that he and those in his employ were in the house some time before the fire broke out, without remarking anything calculated to excite their apprehension ; that the fire originated in the middle of the barn ; that a lantern placed in a stable was found intact after the fire ; that not one residing on the farm had the habit of smoking ; and finally, that public opinion ascribed the fire to the malevolence or the imprudence of a stranger ; because these facts tend at most to establish in favour of Morin and his household the presumption that they were not directly instrumental in setting the place on fire, which evidence, however, in no respect resembles the proof required by Article 1733 of the Civil Code ; and the judgment of the Civil Tribunal of Niort, delivered Feb. 16th, 1873, was therefore pronounced erroneous by the Court of Appeals at Poitiers, and Morin was condemned to repay the Co. *L'Abeille* the sum of 6466 fr. 25 c. paid by the said Co. to the proprietor of the buildings burned May 11, 1872, of which Morin was lessee, with interest from the day of the Co.'s demand for payment.

The following case was, towards the close of 1874, submitted to the Editor of the *Journal des Assurances* for his opinion : G. Geoffroy, a fire ins. agent, was threatened by the lessee of a water-mill, whose movables he had ins. through a sub-agent, with a suit under the following circumstances. The mill itself had been insured by its proprietor. Two months after Mr. Geoffroy had ins. the property of the tenant of the mill a fire broke out, destroying a great part of the estab. The Co. which had written the proprietor's risk made good to him the loss sustained on the building, and then turned upon the tenant and required him, in conformity with Article 1733 of the Civil Code of France, to reimburse the Co. for the indemnity paid to the proprietor ; this the tenant refused to do, on the ground that the agent had neglected to inform him of the necessity he was under to insure his risk as tenant, and he consequently sought to render the agent, instead of himself, responsible to the Co. for the proprietor's loss. Mr. Lavergne, in the journal aforesaid, responded to Mr. Geoffroy to the effect that, even admitting that he might be considered the tenant's madatory in the matter of obtaining his ins., as he was not specially charged with the bus. of insuring his risk as tenant, no responsibility can attach to him for proving as little vigilant as the tenant himself in the management of his affairs.

Warfare.—Fires occasioned from warfare may be specially insured in France. In Paris the charge has been 1 fr. p. 1000 insured. See *Premiums*.

The following important case arose out of the war and the German occupation of Paris in 1871. It came before the Court of Appeals at Angers in 1872. This Court adjudged that where a pol. of ins. contains a clause in which the Co. is exempted from liability for any fire resulting from war, invasion or military force of any kind, *the Co. is exempted not only from liability for such fires as may arise in direct consequence of a battle, but also for all fires which may arise in consequence of the state of things brought about by an invasion.* When the proprietor of a house is driven from it by an invasion, or confined to a particular part of his house by one, the peril of the fire is increased. The house is placed at the mercy of the reckless caprice of soldiers, instead of being watched over by an owner who is interested in its preservation. The intent of the pol. of ins. is to exempt an ins. co. from liability both for fires occasioned by the enemy with a deliberate purpose, but also for those which arise from neglect or a want of diligence on his part. Fires of both classes are excluded from the ins. upon the same grounds and without distinction. Proof that the insured is deprived of the control of his own house in consequence of the war, discharges the ins. co. The Court considered that where a fire occurs in a house which is in the possession and under the control of an enemy, it must naturally have been the result of something done by the enemy.

A portion of the reasoning of the Court was in substance as follows : A house belonging to one Froger was insured in the Co. *Générales*. This house was burnt to the ground on the 15th of Jan. 1871, during the occupation of the country by the Germans. An

action was brought against the Co., and on the trial the Co. offered to prove that, at the time of the fire, the German troops were in exclusive possession of the house, they having expelled the owner from the house and forced him to withdraw into a small building that stood near by, and that the fire was the result of some act or acts of the German soldiers. The materiality of this evidence depends upon the risk intended to be covered by the contract. The contract was made with reference to the regulations of the Co. and founded upon them. They form part of the contract. These regulations not only admit certain kinds of property as proper subjects for ins. and exclude others, but they also classify the kinds of property upon which ins. is issued, according to its character and situation, and affix a different rate of prem. to each kind, according to its class. The effect of fixing different rates of prem. for the different perils insured against, is that the perils insured against are distinguished into different grades, and in that way the prem. charged is apportioned to the protection guaranteed. The apportionment of the prem. is made according to statistical tables, which are constructed with reference to a state of things supposed to be the normal state. Now, when things are in their normal state, the owner of property which has been insured can resist, with the authority of an owner, any act which puts his property in jeopardy, whether committed designedly or otherwise. In the particular case under consideration, the low rate of prem. paid by the insured, namely, 25 centimes on a 1000 frs., shows clearly that the contracting parties had in view merely the dangers that exist under ordinary circumstances. Hence, the Co. in this case was allowed to make the evidence which he offered part of its case, and the deft. was called upon to rebut it if it was within his power. In thus holding, the Court of Appeals overruled the Court of first instance, which had excluded the evidence offered, and adjudged the Co. liable. The Court of first instance was of opinion that for the exoneration of the Co., evidence was necessary that the fire was caused by the enemy intentionally, the hostile intents on his part being manifested either by some act or acts committed by him, or by some act or acts omitted or neglected by him.

Fiscal Burdens on Ins. (France).—The great success which has attended the operations of ins. asso. in France appears, of late years, to have marked them as the victims of unwise legislation in this direction.

1850.—The first fiscal burdens upon ins. were imposed this year, by way of a stamp duty upon all then existing *Fire* pol. of 35 centimes; and as to new pol., the duty was to vary in regard to the amount insured and the duration of the pol. See sub-heading *Fire Ins., Hist. and Statistics of*, at this date.

1871.—In the scheme of taxation, consequent upon the war, propounded towards the end of this year, both *Fire* and *Marine* Ins. became the subjects of "fiscal impositions." The duty imposed on *Fire* Ins. amounts to 8 p.c. on the prem. The tax upon *Marine* Ins. amounts to 50 centimes for every 100 francs insured—that is, *one-half* p.c. The French fire offices have very prudently formed a permanent organization with a view to watch the ravages of the tax upon their bus., and suggest modifications. "We confess we are astonished—even in face of the great demands upon the exchequer of that unfortunate country—to see France, which claims to be at the head of civilization, proposing to adopt a tax upon prudence and forethought! Here is an evidence of the want of international education; the tons of pamphlets which were disseminated and the miles of leading articles which were written in this country to obtain the abolition of the fire insurance duty have not had one iota of good effect in France."—*Ins. Record*, Aug. 1871.

M. Eugene Reboul, the able Ed. of the *Moniteur des Assurances*, fought manfully against this retrogressive step; but all to no purpose.

The stamp and registration taxes imposed upon French fire ins. were stated to be equal to 28·63 p. c. of the amount of ann. losses actually experienced; in other words, of the real cost of ins. in the aggregate.

1872.—Up to this date it had been the custom in France to exempt sums insured under life pol. from *succession duty*, on the principle that the proceeds of the pol. had never vested in the deceased, and therefore formed no part of his estate. In 1872 the practice was changed. See sub-heading *Life Ins. Practice*—"Succession Duty."

1875.—An ann. deficiency in the French budget led the Minister of Finance (M. Mathieu-Bodet) to turn an evil eye towards the *Life* offices. They had escaped in 1871. He, and the commission charged with the matter, now proposed to tax the prem. 1 p.c.; but they appear to have been dissuaded from this, prob. by the offices; and so the tax is to be 1 p.c. on the sum insured, payable as the pol. fall in by way of claims. This surcharging of widows and orphans in the hour of their desolation has an unpleasant aspect; but of course, it is replied, the revenue must be raised, and the national credit preserved!

Fishery Ins.—The details of this branch of ins. as practised in France have been already given under the general title of FISHERY INS.

Floods, Ins. against.—The floods of 1840 and 1846, of which the first caused damage to the amount of 42,000,000 fr. (£1,680,000), and the second of 39,000,000 fr. (£1,560,000), which seemed in magnitude not likely to be surpassed, first directed attention to the desirability of insuring against such contingencies, if any certain data could be obtained. Before anything was effectively done there came the flood of 1856,

from which the damage was so far in excess of the two former as to show that still further observation was necessary.

1869.—Under sub-heading *Agricultural Ins.* we have given some account of the efforts of M. le Hir, at this date, to organize extended mut. ins. asso. in view of alleviating the losses which agriculturists, in certain locations, have sustained by the rush of flood waters over, or its accumulation upon their lands, and the destruction of their produce. And under our general title FLOODS, INS. OF, we have presented a full outline of the data and scheme upon which he proposed to proceed. The prem. for ins. against floods he thought would not average more than 60 centimes p. 100 fr.

1875.—In June of this year floods greater than any previously on record occurred in France. See FLOODS, TABLE OF.

We doubt if *Flood Ins.* has yet become, either in France, or elsewhere, an accomplished fact.

Foreign Cos. Trading in France.—Ins. and other cos. belonging to foreign countries (*Sociétés Étrangères*) had formerly no legal right or authority to transact bus. in France; but as a matter of custom they have long done so; and under the Commercial Treaty of 1860 between France and the U.K., a right for *British* cos. to trade in France was recognized; there has since been a formal Convention on the subject. (See 1862.)

Foreign cos. are by usage not required to obtain any *licence*; they therefore have no admission fees to pay, or duties to perform. They are placed on the same footing as cos. at home. Where a stranger or alien represents such co. in France, he must have a French citizen as bondsman for the payment of taxes etc.

Again, foreign cos. whose *shares* are dealt with on the *Bourse* are not required to pay stamp duty on their entire cap., but only on such a proportion thereof as may be agreed between the Minister of Commerce and the co. in question.

Further, foreign cos. appear to be free from *all taxes* in France except those upon real and personal property.

Under these circumstances, it is not surprising that there are a large and increasing number of foreign ins. and other cos. trading in France.

1862.—By a Convention between England and France made this year, in conformity with the *Treaty of Commerce* of 1860, it is provided that each country grant to all cos. and other asso., commercial, industrial, or financial, constituted and authorized in conformity with the laws in either of the two countries, the power of exercising all their rights, and of appearing before the tribunals, whether for the purpose of bringing an action or for defending the same, throughout the dominions and possessions of the other power, subject to the sole consideration of conforming to the laws of such dominions and possessions. This to apply to all cos. constituted prior to the Convention and to all subsequent ones.

The stringent regulations regarding the foundation of ins. asso. in France [sub-heading *Regulations*, etc.], combined with the immunity which those of other nations enjoy, have led to results which were not difficult to foresee, viz. to the establishment of insurance associations in the U.K. especially intended to trade in France. Of this class may be named the following:

Date of Estab.	Name of Co.	Business.	Founder.	Fate.
1869	La Gauloise	F., L., &c.	M. Cuchotte	Liq. 1873
"	International Union	F., L., &c.	Comte de Suzaincourt	Liq. 1876
1873	Gallia	Fire	M. Lavegerie	Died out
"	L'Etoile Française	Fire, &c.	"	"
"	Probitas	Fire, &c.	M. Boucher	Died out
1877	Immediate European and Colonial	Fire	Comte de Suzaincourt	?

1870.—In regard to pol. issued or other contracts made by foreign cos., questions of jurisdiction may sometimes arise. Thus in the case of the winding-up of the *Hercules* and *International Union* amalgamated Cos., the assignees of a pol. issued in France sued the Liquidator in the French Courts. The Liq. disputed the jurisdiction of the French Courts, and demanded to be sued in England. The Cos. referred to, said he, are being liq. in accordance with the decree of the High Court of Chancery of Lond.; and according to English law all proceedings against cos. which are being so liquidated must be authorized by the same Court, and the pol.-holders must submit to this form of proceeding, for the reason that it forms the law under which the contracts were signed. But the plea in bar was set aside by a decree of the *Cour de Paris* of the 3rd Feb., which was as follows:—"Considering that the contract, the execution of which is now demanded, was made in France by a French subject with a society, the head-quarters of which are in England, but which had at the same time a place of bus. in France. Considering that the plaintiff's demand is authorized by Article 14 of the Napoleonic Code, and that it is not less so by the International Treaty of the 17-21 May, 1862, according to the terms

of which societies estab. as much in France as in Eng. are permitted to appear in Court in either country, either as plffs. or defts., which evidently implies that natives of the two countries shall have the power to bring co-contracting foreigners before the judges of their own country." This decision (adds the *Journal des Assurances*) is as equitable as it is legal. Is it not true, in fact, that when an English co. which has branches and representatives in France solicits a Frenchman to insure, it explicitly promises that the contract will be executed in France? Would not those solicitations be invariably disregarded if it were known that a pol.-holder, should the taking of legal proceedings be necessary, would have to cross the Channel to plead in a London Court, with the nature of whose proceedings he is entirely ignorant? If he consents to insure, it is evidently from a belief that the pol. will be executed in France where it was contracted. The spirit of the Treaty is only therefore respected when an English co. is compelled to plead before the French tribunals.

1873.—The French ins. press complained bitterly of the laws which enabled foreign ins. cos. to trade in France without authorization and without surveillance.

1874.—The *New York Life* opened a branch office in Paris, and has since been transacting a very considerable business. The outcry made by some of the French ins. journals regarding this event was at once laughable and pitiable.

The rapid and extensive hold which the *Gresham Life* has obtained in France is one of the most noticeable features in the history of Brit. ins. enterprise. [GRESHAM LIFE.]

Frauds on French Ins. Offices.—Happily we have not much to say under this head ; but the French offices do not entirely escape such eventualities :

Fire Ins.—While the crime of arson, incendiarism, and other wilful burnings, is kept very much in check by the fear of official inquiry, and of consequent discovery, yet such cases do arise. The most recent instance is the following :

At the Seine Assizes, March, 1877, Antonin Prieur de Lacombe was convicted of setting fire to his apartment in the Rue de Grenelle, for the purpose of obtaining 120,000 frs. from an ins. co., and was sentenced to 10 years' hard labour. The indictment mentioned, as a strange coincidence, that on the fall of the Commune, his own house, his father's, and that of the liquidator—his father, a banker, having failed for 1,900,000 frs.—were all burnt down, the bankruptcy accounts thus being destroyed. The prisoner then obtained 50,000 frs. compensation from the Municipality. No attempt was made to fasten guilt on him for this earlier fire ; but the arson committed last year was so clearly estab. that he could only allege that he acted under temporary hallucination.

Life Ins.—M. Edwin Chadwick, C.B., in his Address on Economy and Trade before the Social Science Congress in 1865, said : "The occurrence of secret murder in view of obtaining the ins. money has led the distinguished jurist and colleague of the Institute, Dupin l'Aîné, to consider the practice of Life Ins., and to condemn the unguarded condition in which it has been allowed to go on." We think this statement requires confirmation. It smacks too much of the old theoretical objection to life ins. in France. See sub-heading *Life Ins.*

The subject will be further considered under the general title of INS. FRAUDS.

Marine Ins.—It has been understood that from time to time an organization has existed for placing English marine ins. risks of a doubtful class (chiefly for account of *Liverpool* owners) among marine underwriters in France ; and that large losses have resulted. Events which occurred in Eng. in 1870, for the moment disarranged this organization. It has been in active operation since ; as certain French underwriters have learned to their cost. Close observation of the periodical operations of the parties concerned would prob. defeat these destroyers.

In 1869 it was discovered that M. Taillefer, the then cashier of *L'Union*, had misappropriated a sum of no less than 1,460,000 fr. (£58,000). He had been 39 years in the Co.'s employ. He lived very quietly, and did not, it was asserted, spend a farthing of the plunder on himself ; he used it all to keep alive an obscure Gov. print—the *Etendard*.

French Ins. Offices Trading in other Countries.—It has not become a general practice for the French ins. offices to found branches or agencies in distant countries. Many of them, indeed, transact bus. in *Belgium*, in *Switzerland*, *Italy*, and *Austria*. Some have ventured into *Spain*. A few of the younger cos. are operating in *Algeria* and even *Egypt*. It is only quite recently that wider ranges have been contemplated.

1856.—The first agency for any French ins. co. in *England* was founded this year by *La France*, in view of enabling the insured to escape payment of the *per-centage duty* then imposed on English fire ins. The circumstances have been fully set out under FIRE INS., HIST. OF.

1873.—*La Caisse Général des Assurances Agricoles et des Assurances contre l'Incendie* commenced bus. in the U.S., and made a deposit of 100,000 dols. This is the first French fire office which had extended its bus. across the Atlantic. The principal agency was in *Philadelphia*, and Messrs. Kremer and Ferrière were managers. It has more recently (1875) extended its operations into other States.

This Co. has a considerable bus. in London under the able management of Mons. E. Albo De Bernalés.

1875.—It was announced at the close of this year that the following French F. offices

had entered into arrangements for commencing bus. in the U.S., viz. *La Confiance*, *La Paix*, *La Midi*, *Le Monde*, *Le Phénix Espagnol*. The plan of operation is that the *Confidence Co. d'Assurances* should make the deposit of 200,000 dol. in the State of N. Y., and should issue pol., the engagements being guaranteed by the other 4 cos. Mr. M. Rush Warner, President of *Penn Fire*, of Philadelphia, is to act as agent, assisted by M. de Rupert.

1877.—The following *French ins. cos.* had agencies or branches in Eng. at this date.

Estab. of Co.	Name.	Estab. in Eng.	Business.	Manager or Agent.
1863	Caisse Générale de Ré-assurances et de Co-assurances.....		(Fire Re-in- surance)	Wm. Williams.
1863	Caisse Générale Agricoles.....		Fire	M. Albo Bernalés.
1852	L'Europe		Fire	W. S. J. Williams.
1864	Le Monde		F. Re-insur.	W. Ritchie Steven.
1853	Le Trésor		Fire	W. S. J. Williams.

In addition to the above, *La Compagnie d'Assurances La Gironde* has had an agency in the U.K. for several years; but it is now closed.

Several French marine offices are understood to have agencies in London.

Forests, Ins. of.—In a country so much depending on wood for fuel, the question of forest fires was certain to draw marked attention; and it was equally certain that attempts to provide an indemnity would follow. What has been done in this direction has been already explained under general title **FORESTS, INS. OF, AGAINST FIRE**.

In 1837 the royal forests of France numbered 1473, containing 1,019,139 hectares, equal to 2,517,273 acres. Their total approximate value was estimated at £11 m. p. acre, or in the whole £29,079,736.

It was proposed to include injury to *Forests* by water as part of the scheme of **FLOOD INSURANCE**.

Friendly Societies (*Sociétés de Secours Mutuels*).—These, which are sometimes spoken of under the broader title of Provident Sos. (*Sociétés de Prévoyance*), have never taken a strong hold in *France*, notwithstanding that repeated steps have been taken in view of fostering them. We propose here to trace their brief history.

1694.—The first mention of these sos. occurs this year. They then assumed the form of religious asso. or *gilds*, as they have done in most Roman Catholic countries.

1789.—Between the date last given and this 3 add. F. sos. were founded. And during this year 3 others were estab. From this period they began to make more rapid progress.

1805.—There were at this date 26 F. sos. in *France*. It was believed that some of the previous sos. had been dissolved by political events; and it is said that where this was the case, the funds were preserved for the benefit of the sick and aged, and applied to all who were in proximity.

During this year the *Société Philanthropique* directed its attention to F. sos. It appointed a Committee of its members to inquire into the number and regulations of those then in *Paris*; as also to ascertain what measures should be adopted for their more general encouragement.

Upon the Rep. of this Committee steps were taken of a novel character. Grants of 100 frs. each were made to the sos. estab. in 1789; and premiums of from 100 to 200 frs. were offered to every society that should thereafter be instituted, so soon as 60 members were obtained. It was at the same time intimated in the public journals that copies of laws considered well adapted for F. sos. in general would be furnished gratis to all those who might choose to apply for them. In fact, the steps then being taken in England to promote the formation of these sos. were copied in *France*—with the add. of the money grant. A similar so. in *Marseilles* followed the example of the *Paris* so., and through its instrumentality no less than 40 sos. were estab. in the last-named city within the space of 3 years. At a later date the Gov. extended its encouragement and support to the same object.

1808.—There was pub.: *Des Sociétés de Prévoyance, ou Association Economique de Secours Mutuelles; Discours prononcé à la Séance Publique de la So. Bienfaisante de Marseilles, le 21 Fév. 1808, par M. Casimir Rostan.*

1821.—On the occasion of the baptism of the Duke of Bourdeaux in May of this year, 50,000 frs. (£2000) were distributed among the F. sos. in *Paris*. The effect of this system of State encouragement was to cause the formation of a number of weak sos.; and apparently no permanent good resulted.

1822.—The Rep. of the *Société Philanthropique de Paris* for this year stated that in respect to the pensions [superannuation allowance] allowed to the aged members, there had been much improvidence; and that in the sos. generally the members' contributions had been barely sufficient to meet the demands in case of sickness, so that no provisions had been made for these pensions.

1823.—There was pub.: *Rapport de M. du Pont de Nemours, à la Société Philan-*

thropicque, au nom de les Sociétés de Prévoyance, etc. From this Rep. it appeared that there were about 160 F. sos. estab. in Paris at that date. From other sources we learn the sickness experience of the sos.—so far as the same could be gathered from the small number of members under observation. During 15 years, out of 100 operatives between the ages of 20 and 60, there were constantly, on an average, from 1 to 2 confined to their beds by sickness, and 2 or 3 suffering under lighter illness, or convalescent.

1824.—There were now 164 of these sos. in Paris; but the aggregate of their members was only 14,700; and their total funds but 821,198 frs. [£34,216 stg. or £2 6s. 9d. p. member].

There was no special enactment under which these sos. could be legally constituted. Their rules had to be submitted to and approved by the Prefect of Police; and notice thereafter was required to be given to him some days previous to the holding of each meeting.

M. Everat, a printer in Paris, and a member of the Committee of the Philanthropic So., was the moving spirit in the efforts we have described.

1830.—M. Villermé, being requested by the *Société Philanthropique de Paris* to make a Rep. on the subject of the sickness and mort. experienced by the F. sos. of Paris, drew the attention of the delegates of these sos. to the returns of the *Highland So.*; and suggested that the experience of this So. might be adapted to the wants of the French sos. by correcting the T. according to the differences which had been found to exist among the members of the sos. of the two countries. Nothing was immediately done; but Mr. Brown has pointed out that this step was a practical recognition of the law, "which most subsequent obs. have confirmed," of the constant ratio which prevails between the laws of sickness and mort. (See 1844.)

1844.—M. Deboutville, acting upon the suggestion of M. Villermé in 1830, commenced the construction of T. of rates to be charged to the members of the French F. sos., graduated according to ages. After comparing for the first 30 years of the ages taken, the sickness shown by the *Highland So.* experience, with the *Carlisle T.*, he multiplied the numbers so obtained by four-fifths, being the ratio of the mort. of *France* to that of *Eng.*, as shown by M. Quetelet's *Belgian T.* The result was a mean of 18½ days' sickness ann. between the ages 26 and 70—which would be reduced to 12·77 if restricted to the periods 21 to 65 years of age. The mean for each 5 years of age was as follows:

Ages.	Days of Sickness.	Ages.	Days of Sickness.
20 to 25	5·9	45 to 50	12·2
25 „ 30	6·7	50 „ 55	14·5
30 „ 35	8·0	55 „ 60	18·3
35 „ 40	9·5	60 „ 65	28·7
40 „ 45	10·7	65 „ 70	69·8

The sum of the total days of sickness—923·5—is 60 more than that of Mr. Ansell's, and 130 less than that of Mr. Neison. Mr. Brown says: "However defective this T. may be in authority, from the mode in which it was formed, it deserves attention as the first attempt practically to apply the knowledge already acquired in another country, and regulate the sickness of France by a law deduced from its mort." Speaking for ourselves, we are not surprised that a T. so constructed soon ceased to be regarded as of any authority.

1849.—The *Société Philanthropique*, finding itself no longer able to give the attention which for nearly half a century it had bestowed upon F. sos., a number of enlightened men, "standing high in the Gov., in banking, or in commerce," formed a new union under the title of *Comité pour la Propagation des Sociétés de Prévoyance*, in order to extend the working of these sos. In the inquiries made by this Committee into the state of the *Sociétés de Secours Mutuels*, it was found that many were in much the same unsatisfactory state as they had been found to be in Eng., and principally for the same reason, viz. the want of data for calculating the true money values of the benefits they undertook to confer. The Committee therefore took steps to collect data of the experience of the then existing sos. of this class. The results of their labours will be more conveniently reviewed under general title FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF; and in part under sub-heading in this art. *Mort. T.*

1852.—Mons. G. Hubbard, in his *Mémoire sur l'Histoire et l'Organisation des Sociétés de Secours Mutuels*, which was the practical outgrowth of the measures adopted by the Committee of 1849, makes an endeavour to ascertain the number of then existing F. sos. in France. He compiled his list very much from the accounts pub. by the Gov. of the investments of such sos. in the Savings Banks; and he was aware that it could not, as a consequence, be entirely complete. He estimated that there might be a total of about 2500 sos., with an average of 160 members each—giving a total of 400,000 members out of a pop. of 35,401,761. Their ann. income he estimated at £288,000.

As a matter of fact, he only pub. the names and locations of 2056 F. sos., with investments of £228,809,—less, as it was pointed out, than two-thirds of the then ann. income

of the Manchester Unity of Odd Fellows in Eng. He found too that not only were many of the sos. in a like deplorable condition with that of many of the English sos., but that the same causes contributed to their dissolution. Thus some divided the whole of their funds at the end of every year. In others the so.'s saint's day was held in doubtful honour at a *cabaret* (wine-shop). The *aubergiste* (tavern-keeper) let his rooms to the members, and becoming the delegate, took care that the funds were expended to a great extent with himself. Occasionally was to be found in the rules a fine for any one who did not spend 50 cents in drink. Such practices were indeed dying out. The sos. which had adopted them had died out too. Thus out of 205 sos. estab. before 1831, there had failed before 1840, no less than 36: and 37 of the remainder had not a fund of £4 p. head per member. In *Rouen*, of 35 sos. estab. since 1808, there had passed away 22 before 1843.

In the same publication, M. Hubbard gave several valuable T., which will be given under the general title FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF.

1868.—Under the Gov. Life and Accident Scheme of Ins. estab. in France this year, F. sos. were authorized to insure their death risks with the State in "Collective" form if they desired.

We shall hope in our general art. on FRIENDLY SOS. to furnish some more recent details regarding F. sos. in France. We can now only add that they still do not flourish on French soil; and perhaps for this very sufficient reason—that the generally frugal habits of the people render them less necessary than with ourselves.

Frost, Ins. against.—Under sub-heading *Agricultural Ins.* we have given an outline of the efforts of M. le Hir, in 1859, to organize extended mut. ins. asso. in view of alleviating the losses to which the vine-cultivators are periodically subjected by the damage from Frost.

It is not very easy to obtain exact information regarding the extent of the damage from time to time inflicted on the agricultural produce of France by frosts. It is said that in some years entire Departments, "the third or fourth part of France," are subjected to loss from this cause.

1830.—Frost occasioned a loss of more than 29 millions of fr.—£1,160,000.

1851.—The losses by frost during the 26 years 1826–51, and regarding which the Gov. of France had granted aid, were found to have amounted to 217 millions of francs (£8,680,000)—or about 8 millions of fr. (£320,000) p.a. But as no claims were made for heavy losses of this class from about 20 Departments, amongst which may be named du Midi, de la Corrèze, de la Gironde, du Gard, de l'Hérault and des Bouches du Rhône, the returns are evidently incomplete.

In the last-named Department (des Bouches du Rhône) the olive harvest of 1830 was entirely destroyed. The losses in the Department from 1826 to 1851 reached 31 millions of frs. (£1,240,000). For the Department de l'Hérault during the same period the losses were 26 millions of frs. (£1,040,000). For the Department du Gard 16 millions of frs. (£640,000). For the Department de la Gironde 10 millions of frs. (£400,000). In the Department de la Corrèze the losses were 8 millions of frs. (£320,000).

There were only 20 Departments wherein the damage by frosts exceeded 2 million frs. (£80,000) p.a. And there were 66 Departments wherein the losses from this cause were below the average of 100,000 frs. (£4000) p.a.

1859.—M. le Hir, writing at this date, spoke of it as certain that great ravages (though of a minor character from those already spoken of) were caused by frost in the Departments of the centre and the north of France, upon the cereals, and especially upon the potato crops, at a particular period of growth. "The cultivators of these crops perhaps are not so ready with complaints, because the effects of the frosts being principally felt when the plants are young, the immediate loss may be repaired by a change of temperature; or because the season may allow of a fresh sowing and the renewal of the crop."

If ins. against frost were to be extended to all the crops liable to be affected, it was estimated that the total insurable value would reach from 4 to 6 milliards—£160,000,000 to £240,000,000 stg. The losses it was thought would reach 20 millions of frs. (£800,000) p.a. It is seen therefore that a contribution or prem. of about 5 frs. p. 1000 frs. insured would be required. Adding 50 centimes for cost of management, the prem. would work out at about 11s. for each £100 insured.

It was suggested that it might be well to limit this branch of ins. to certain branches of produce, as vines, olives, etc., where the exact amount of damage might be more easily ascertained.

1873.—A substitute of a very novel kind, in view of altogether dispensing with the necessity of ins. against frost, was proposed in France this year—and this was, *by the creation of artificial clouds*. We give the following brief outline of the method.

The serious loss entailed upon vine-growers in France in the spring season of the year had long attracted the attention of scientific men, who had sought in vain for a remedy. At length M. Gaston Bazile of Montpellier, a well-known scientific agriculturist and chemist, and M. Le Vicomte de Laboyère, hit upon the expedient of creating clouds with the vapour of heavy hydrocarbons; and, it is said, met with decided success.

When the sky is clear and the temperature little above freezing-point, and there is an absence of dew, clouds, and wind, there is great danger of frost; and when the frost comes in April or May, the damage to the vineyards is enormous. In the Côte d'Or and the south of France, the loss of half a crop of grapes by this frost—known as the effect of the *lune rousse*, from an old notion that the moon at a certain period burned up the young buds to redness—is not an uncommon occurrence. Sometimes the vines suffer from the effects for several years afterwards.

The theory of the effect of the *clouds* is that they intercept the radiation of the heat of the soil into space, and therefore prevent frost. The plan recommended is, when the danger threatens, to light a number of grease pots, filled with oil of tar, or other heavy oil, and placed all over the ground at a distance of 15 yards from each other. Soon the heavy fumes will rise to a certain height, spread themselves over a large space, and hang there for 3 or 4 hours. Sometimes it may be necessary to refill the pots. The cost is said not to amount to more than 8s. an acre; and the operation is not usually necessary more than 2 or 3 times in a season.

An experiment was made in March, 1873, at Suresnes, near St. Cloud, in the presence of many of the members of the Agricultural Society of France and the farmers of the neighbourhood, and it was considered highly satisfactory. A plot of about 50 acres was selected, and 3 hectolitres (66 gallons) of heavy oil burnt. As soon as the pots were all lighted, columns of black smoke rose sluggishly over the surface, and formed themselves into heavy clouds. The wind was blowing pretty fresh, so the mass drifted towards St. Cloud. But in calm weather, such as that when frosts threaten, it was stated, and believed, that the whole plot of land and a good deal more would have been protected for hours by the artificial clouds. Some of the fruit-growers present, after seeing the effects, and hearing the explanations, thought the plan might be applied to the protection of peach and other delicate fruit-trees.

We believe as a matter of fact that *Frost Ins.* has never yet come into general practice in France. We shall deal with the subject further under the general title FROST INS.

Glass Ins. (*Le-Bris des Glaces et Carre Aux*).—The bus. of ins. glass against breakages, commonly designated in *France*, as in Eng., "Plate-Glass Ins.," has been carried on for some years in France; and indeed appears to have originated there. The first co. founded for carrying it on bears date 1828. The bus. was not introduced into England until 1852.

Date of Estab.	Name of Company.	Location.	Nature of business.
1828	La Parisienne	Paris	Windows.
?	La Prudentia	Paris	Windows.
1842	La Générale	Paris	
1865	La Célérité	Paris	

Under the proposed scheme of Gov. Hail Ins., it was intended to include the ins. of glass broken by hailstones. See *Hail Ins.* 1859.

Government (or State) Ins. Projects.—Under a paternal gov. such as that which has prevailed in *France*, it was to be expected that schemes of State adoption or control of ins. interests would certainly arise. This supposition is founded on fact, and we proceed to notice the various projects of this character, or in this direction.

1848.—About this date a scheme was brought forward for placing the entire ins. bus. of this country in the hands of the State: with the view of applying the profits resulting therefrom to the remission of taxation. The scheme was only repelled by the determined opposition of the cos., and the talents, experience and energy of M. Dubroca, who was chosen on that occasion to represent their interests. [Sub-heading *Fire Ins.*]

1856.—Under sub-heading *Annuities* we have already given an outline of the attempt, at this date, of the French Gov. in regard to the sale of life annu.

1859.—Under sub-heading *Hail Ins.* we have given the outline of a scheme which it was intended should develop into "Compulsory" Ins., under Gov. authority.

1868.—On the 11 July this year a law was passed under which the French Gov. instituted a *Caisse d'Assurances*, under a State guarantee.

Previously to the enactment of this law the bill (*projet de loi*) was referred to a commission consisting of M. Barbet as President, and M. le Baron de Beauverger as Sec. After traversing briefly the results of ins. operations in *France* and in *England*; and after referring to Mr. Gladstone's Gov. ins. scheme as being a failure—but quoting Mr. Gladstone's speech in introducing the measure as laying down accurately the principles upon which State intervention in ins. matters should proceed; and after referring to the State intervention in regulating the affairs of ins. asso. in *New York*; it is pointed out that the measure now proposed, being restricted to small ins., such as the existing French cos. did not care to take, there would be no interference with their interests; and finally the commission wound up in favour of the project.

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Caisses d'Assurance, l'une en cas de décès, et l'autre en cas d'accidents résultant de travaux agricoles et industriels. In the Appendix was given T. of life and accident prems. deduced from several T. of mort.; and also a résumé of accidents in mines, etc., during the 5 years 1860-64.

This Gov. ins. scheme consisted of 2 divisions, viz.:

1. *Life Ins.*, wherein a life pol. might be purchased either for a single or an ann. prem. calculated upon *Deparcieux's* T. of mort. at 4 p.c. int.; and a margin of 6 p.c. for working expenses. There was no limit to the minimum sum which might be insured; but the maximum sum must not exceed 3000 fr. (£120). The limits of age were from 16 to 60 years. In the event of death within 2 years after effecting the ins., the prems. paid with int. thereon at 4 p.c. would alone be paid. In the event of lapsing of pol. by non-payment of prem. for 12 months, the value of the pol. at the time of such non-payment of prem. to be ascertained, and a corresponding sum paid at death. The surrender value was in fact applied to the purchase of a "free pol."

Under this portion of the scheme the death risks of friendly sos. might be ins. in "collective" form.

The following T. shows the prem. required to ins. 100 fr. [or £100 if the figures be read in stg. instead of francs]:

Age next Birthday.	Single Premiums.	ANNUAL PREMIUMS				During whole of life.
		For 5 Years.	For 10 Years.	For 15 Years.	For 20 Years.	
17	25'9679	5'63623	3'15223	2'34572	1'95636	1'32283
18	26'3987	5'73195	3'20761	2'38772	1'99190	1'35206
19	26'8014	5'82105	3'25865	2'42635	2'02455	1'37966
20	27'1739	5'90228	3'30479	2'46122	2'05393	1'40545
21	27'5582	5'98608	3'35240	2'49722	2'08417	1'43231
22	27'9548	6'07257	3'40154	2'53438	2'11529	1'46030
23	28'3642	6'16187	3'45230	2'57278	2'14732	1'48950
24	28'7870	6'25410	3'50473	2'61237	2'18031	1'51998
25	29'2239	6'34941	3'55893	2'65311	2'21428	1'55183
26	29'6755	6'44793	3'61497	2'69505	2'24927	1'58514
27	30'1425	6'54983	3'67295	2'73823	2'28532	1'61999
28	30'6257	6'65525	3'73295	2'78268	2'32253	1'65651
29	31'1257	6'76437	3'79485	2'82847	2'36101	1'69480
30	31'6435	6'87738	3'85850	2'87562	2'40087	1'73500
31	32'1799	6'99445	3'92395	2'92419	2'44224	1'77723
32	32'7358	7'11579	3'99124	2'97423	2'48526	1'82165
33	33'3122	7'24161	4'06044	3'02589	2'53017	1'86842
34	33'9101	7'37115	4'13158	3'07937	2'57714	1'91773
35	34'5306	7'50349	4'20471	3'13487	2'62632	1'96978
36	35'2214	7'65197	4'28798	3'19878	2'68316	2'02879
37	35'9867	7'81870	4'38238	3'27203	2'74846	2'09553
38	36'7842	7'99247	4'48108	3'34949	2'81770	2'16665
39	37'6156	8'17363	4'58463	3'43161	2'89127	2'24255
40	38'4826	8'36259	4'69365	3'51878	2'96964	2'32371
41	39'3872	8'55975	4'80886	3'61157	3'05324	2'41063
42	40'3314	8'76554	4'93106	3'71063	3'14255	2'50391
43	41'3174	8'98178	5'06153	3'81655	3'23812	2'60422
44	42'3472	9'21053	5'20138	3'93015	3'34067	2'71232
45	43'3787	9'44006	5'34207	4'04551	3'44509	2'82415
46	44'4122	9'67047	5'48563	4'16260	3'55143	2'93995
47	45'4479	9'90184	5'63034	4'28136	3'65981	3'05996
48	46'4859	10'1359	5'77656	4'40171	3'77052	3'18444
49	47'5263	10'3729	5'92439	4'52371	3'88388	3'31364
50	48'5254	10'5966	6'06441	4'63992	3'99368	3'44212
51	49'5234	10'8187	6'20426	4'75663	4'10601	3'57499
52	50'5632	11'0542	6'35310	4'88155	4'22798	3'71851
53	51'6040	11'2887	6'50175	5'00808	4'35395	3'86767
54	52'6451	11'5220	6'64994	5'13654	4'48434	4'02268
55	53'7292	11'7695	6'80787	5'27574	4'62703	4'19067
56	54'8156	12'0165	6'96580	5'41903	4'77607	4'36616
57	55'9038	12'2599	7'12339	5'56686	4'93188	4'54955
58	57'0361	12'5136	7'29232	5'72903	5'10327	4'74905
59	58'2159	12'7808	7'47551	5'90821	5'29286	4'96666
60	59'4466	13'0657	7'67653	6'10727	5'50359	5'20604

2. *Accident Department*, wherein life annu. are granted to persons engaged in agricultural or industrial pursuits, who are rendered permanently incapable of labour by

accident arising in the execution of their duties; and assistance to the widows and infant children of those who die from a like cause.

The Accident fund was to be composed of (1) the subs. of the members, which in no case were to exceed 8 frs. (6s. 8d.) p.a.; and (2) of a State subsidy of a million frs. (£40,000); and (3) of gifts and legacies. In the case of the death of a bachelor or childless widower by accident, having a sexagenarian parent or parents, the benefit to extend to them. The principle of "Collective Ins." was extended to public departments, industrial estab., and railway cos. For further details of the working of this portion of the scheme, see sub-heading *Accident Ins.*

A Commission was appointed for the supervision of the bus. of the Department; and was charged with the duty of making a yearly rep. to the Emperor, which was to be communicated to the Senate and Corps Legislatif.

By an Imperial Decree dated 10 Aug. 1868, the conditions of ins. were laid down in great detail, with forms, etc. Proposals might be made either in Paris to the *Caisse des Dépôts et Consignations*, or in the Departments to the Local Treasurer, or Post Offices. In the latter case a provisional receipt is given to be exchanged for the "livret police" in due course.

After the pol. had been once granted, prems. might be paid to any authorized receiver in any locality. If not paid within 30 days after they fall due, int. at 4 p.c. p.a. is charged. All prems. charged for age next birthday. A lost pol. might be renewed subject to certain formalities.

1869.—A set of new regulations, instructions, and tariffs were issued; but the variations were so slight as to call for no comment here.

The *Accident* portion of the scheme alone has become popular.

Hail Insurance.—In a country so dependent upon its agricultural produce as France, it was certain that the devastations from hail—which occur there with singular severity from time to time—would lead to the organization of associations in view of mitigating the individual loss. It appears prob. that hail ins. was first practised in France. As early as 1822 a mutual asso. commenced the bus. at *Dijon*. In 1823 *La Cérès* was founded in Paris as a mut. asso. and still exists.

1835.—Down to this date no less than 23 hail ins. asso. were established. Nearly if not quite all of these were local and mutual. We believe the greater number have ceased to exist.

1842.—In the 17 years from 1826 to this date the total damage done by hail to the agricultural produce of France was estimated by M. Dubroca to have amounted to 658,268,840 frs. (£26,330,754), or on an average about £1,550,000 p.a.

Out of 37,192 Communes in France, 19,111 only had been subject to this visitation; and the remainder, being very nearly one-half, had entirely escaped. The damage effected had varied very much in the different Departments. The Department of Dordogne for instance had suffered to the amount of £1,287,680, or an average of £75,746; whilst the damage in that of Finisterre was only £54 p.a. on an average.

M. Victor Masson also made some investigations into the subject at this date. He found the uncertainty attending the transactions of asso. for hail ins. very great. Thus, out of 11 such asso. existing in 1842 (one being only recently formed), 6 only had been able to give their members full indemnity; the remaining 5 having only satisfied a proportion of the actual claims, varying from 35 to 60 p.c. Those which had been successful in according the full security they had promised, had been favoured both by the freedom of their districts from storms, and by having declined the more dangerous risks, such as oleaginous plants and tobacco.

1844-5.—These were unfortunate years for hail ins. Out of 20 asso. then in existence, only 4 were able to give complete indemnity. One paid 56 p.c. of the losses which had been experienced; another 40 p.c.; another 30 p.c.; and one only paid 12 p.c. Several pub. no accounts during these years; from which it was inferred that they were not in a prosperous condition. The Sec. of the *Assurances Mut. contre la Grêle*, in his Rep. for 1844, while regretting that they had only the power of paying 30 p.c. of the losses of those members whose crops had been destroyed, endeavoured to console them with the reflection that it was a larger proportion than any other asso. [trading in the same province] paid that year: which were only 12½, 18, and 25 p.c.; and hoped that by extending their ins. into the north, where the losses were lighter, more satisfactory results would be obtained. The summary of the accounts of that asso. for 1844 presented the following: subs. (prems.) received, £2860; losses, £6448; expenses, £692—together £7140. Deficiency £4280!

1848.—The uncertainty in the operations of the ins. asso. of this class naturally tended to prevent persons from insuring. During this year the value of the property requiring protection from hail was ascertained to be £248,920,000. The sums actually insured reached only £8,440,000, or less than 4 p.c.

1851.—The losses by hail in France for the 26 years ending with this year were found to have been 984,292,849 frs., giving an average of 35,153,316 (£1,400,000) p.a.

1859.—Under sub-heading *Agricultural Ins.* we have already given a brief account of the efforts of M. le Hir about this date to organize extended mut. ins. asso. in view of

affording more certain relief against the ravages of hail. He had prepared statistics on a more comprehensive scale than any previous ones. Here are his figures :

1826 Damage by Hail	£880,000	1844 Damage by Hail	£2,280,000
1830 " "	1,840,000	1845 " "	2,000,000
1831 " "	2,160,000	1850 " "	480,000
1833 " "	840,000	1851 " "	600,000
1839 " "	4,680,000		

It had been found by observation that hail-storms were subject to certain laws, by which their course is directed ; and these not according to general zones, but in certain sinuous paths, varying greatly in width, so that the risks from hail could not be estimated either by zones, nor departments, nor arrondissements, nor cantons, but only by communes. Sos. for mut. ins. against hail had long since discovered that some localities were more exposed than others to this risk ; but not possessing the elementary statistics necessary to determine and assort the risks, they adopted, at first, the distribution by zones or departments. Finding the insufficiency of this arrangement, they endeavoured to remedy it by deciding that in the first instance the contributions of each department *should be applied to cover the losses peculiar to itself*, and the surplus only be carried over to other departments in which the operations of the sos. extended. But so long as the contributions of departments which were less exposed were not diminished thereby, it only served to demonstrate the defects of the system. And no system of ins. (says M. le Hir) was likely to become popular or well estab. in which the prem. for the risk were not better apportioned.

Where the divisions adopted were not based upon the experience of the sos. themselves, it had become usual to regulate the classification by *the more northern or southern locality*. Thus France was divided for this purpose into geographical divisions, as "du Midi," "du Centre," and "du Nord"; but the result of more careful statistical inquiries had shown the fallacy even of this classification. In the division "du Centre" were found to be a number of departments *least liable* to hail-storms, and also some of those *most liable*. It was thought that a further division was necessary, which should embrace the departments on the sea-coast. But even here, while the liability to hail-storms is usually much less, there were found some departments with a contrary tendency, as Le Nord, Le Pas de Calais, La Charente Inférieure, and especially La Gironde.

Again, it was found that even the statistics of the loss in each of the departments observed upon required some adjustment, or would otherwise produce fallacious impressions. Thus in departments which were rich and teeming with produce of greater value, such as La Gironde, Le Rhône, etc., the amount of the destruction might be considerable, and yet the actual number of losses be less than in departments apparently less exposed. The same causes of irregularities were to be observed even in arrondissements, cantons and communes of the same department—rendering the classification by zones or by departments almost impracticable. Hence there were great difficulties in applying one rate to any large area, wherever it might be situated.

Next, some of the cos. adopted a classification based upon their own experience. Thus in 1848 M. Duboucheron, as one of two bases for the risks for *L'Union Générale*, took a division by communes. But as he made no distinction between the communes devastated once and those in which hail-storms had never occurred (in recorded experience), those subjected to the smallest risks were deterred from insuring, and the best and most extended class of ins. was consequently lost. In 1853 *La Société Mutuelle de Toulouse*, consulting its own experience, over a period of 10 years, collected in the district "du Midi," resolved upon a classification by communes. The *Compagnie Générale d'Assurances*, in 1854, obtained authorization to carry on the bus. of hail ins., and fixed its rates upon a classification of communes.

The *rates of prem.* heretofore charged by the mut. hail ins. asso. had been from 1.50 to 2.50 fr. p. 1000 fr. insured, varying with the nature of the produce exposed to risk. Thus vines were charged a higher contribution than grain, because more liable to damage ; grain proportionably more than grass ; while olives and tobacco even more than vines.

The system of classification now proposed to be adopted was of a more minute and scientific character. The risks were to be classed according to the number of times each commune in the canton or arrondissement in which it is situated had been visited by hail. This, it was believed, would afford the means of allowing the more safe locations to be rated at their true value. It was evident (said M. le Hir) that a commune never struck, situate in an arrondissement never struck, runs less risk than a commune never struck which is situate in an arrondissement struck one or more times ; and that the degree of risk may be estimated according as a commune never struck is *more or less distant* from others frequently exposed to risk.

The following T. embodies these obs. on the divisions of hail-storm risks into classes according to locality—the rate p.c. being set against each commune relative to the degree of risk to which it is exposed for various classes of produce. Thus an agent furnished with the position on the scale of each commune in his district, is enabled at once to quote the corresponding prem.

TABLE OF RATES OF CONTRIBUTION PER CENT. FOR HAIL INSURANCE IN FRANCE—INCLUDING COSTS OF MANAGEMENT.

Communes not struck from 1856 to the end of 1851, situated in										Communes struck from 1856 to end of 1851.												
Arron- disse- ment struck	Arrondissement not struck, but canton struck.					Canton struck.					Once.	Twice.	Three times.	Four times.	Five times.	Six times.	Seven times.	Eight times.	Nine times.	Ten times.	Eleven times.	Twelve times.
	Once or twice.	Three to eight times.	Nine to more.	Once.	Two or three times.	Four to six times.	Seven times or more.															
1	2	3	4	5	6	7	8		9	10	11	12	13	14	15	16	17	18	19	20		
224	382	618	854	1513	2242	3533	6655		9088	4771	2474	1536	944	690	467	308	192	117	96	53		
Number of Communes struck in each rank, from 1856 to end of 1851.....																						
<i>Class I.</i> —Grasses, plants used for fodder, beet- root, potatoes, cabbages, turnips, carrots, chicory, maize, straw, glass placed vertically.. <i>Class II.</i> —Cereal crops, wheat, barley oats, spilt, millet, lentils, peas, horse-beans, vetches, madder, chestnuts, fruits used for cider, mul- berries, nuts, almonds..... <i>Class III.</i> —Plants used for fodder, and beetroot cultivated for seed, buckwheat, hemp, rapeseed, sesame, oleaginous plants, mustard, saffron, royal, felling, thistles, aniseed, coriander, cherries, gooseberries, etc..... <i>Class IV.</i> —Flax, hops, onions, tomatoes, melons, figs, plums, apricots, nursery trees, osiers, vines, glass placed horizontally <i>Class V.</i> —Tobacco, Olives																						
.04	.06	.08	.10	.12	.14	.16	.18		.20	.22	.24	.26	.28	.30	.32	.34	.36	.38	.40	.42		
.14	.21	.28	.35	.42	.49	.56	.63		.70	.77	.84	.91	.98	1.05	1.12	1.19	1.26	1.33	1.40	1.47		
.20	.30	.40	.50	.60	.70	.80	.90		1.00	1.10	1.20	1.30	1.40	1.50	1.60	1.70	1.80	1.90	2.00	2.10		
.30	.45	.60	.75	.90	1.05	1.20	1.35		1.50	1.65	1.80	1.95	2.10	2.25	2.40	2.55	2.70	2.85	3.00	3.15		
.40	.60	.80	1.00	1.20	1.40	1.60	1.80		2.00	2.20	2.40	2.60	2.80	3.00	3.20	3.40	3.60	3.80	4.00	4.20		

By this T. it is seen that there were 224 communes situated in arrondissements which had never been struck by hail. These communes, according to the T., would pay for the first class of agricultural produce only 4 centimes p. 100 fr. of value insured; for the 2nd class they would pay 14 centimes. By the same T. out of 2078 communes situated in cantons not struck, the most heavily charged would only pay for produce of the first class 10 centimes p. 100 fr.; and for the 2nd class only 35 centimes. As to communes only struck once by hail, and thus warned of the advantage of ins., they would only pay for grain, etc., 70 centimes p. 100 fr.; while the rates for other risks are proportionately low.

In order to demonstrate that these contributions were sufficient, it was assumed that the 8th and 9th ranks represented together the mean rate; and upon this

supposition the following estimate was deduced of the total receipts from premiums in each class, on an assumed total value of 6 milliards of fr. value (£240,000,000) :

Class I.—Total estimated value 1600 millions fr. (£64,000,000), which,	£
at 19 centimes p. 100 fr., the mean of 8th and 9th ranks, give ann.	136,000
Class II.—Total value 2700 millions fr. (£108,000,000) insured at '665	
p. 100 fr. give ann.	718,200
Class III.—Total estimated value 660 millions fr. (£26,400,000) insured	
at 95 centimes p. 100 fr.	250,800
Class IV.—Total estimated value 1000 millions fr. (£40,000,000) insured	
at 1'425 p. 100 fr.	570,000
Class V.—Total estimated value 40 millions fr. (£1,600,000) insured at	
1'90 p. 100 fr.	30,400
Total product of contributions including charges ..	£1,705,400
Deduct charges for management for the 6 millions of francs at 5 centimes	
p. 100 fr.	120,000

Leaving for actual losses and other expenses of asso. ... £1,585,400

This sum was reckoned amply sufficient, since the losses from hail in France did not amount to more than 35 or 36 millions of fr. p.a.

This estimate was based upon the returns up to the end of 1851. Further observations extending over the next 7 years added nearly 1000 further communes to those visited ; and would involve corresponding alterations in the classification and increase of rates. We have given the preceding details in order to show the great care bestowed upon the investigation of the data for this branch of ins. in France.

It was proposed by M. le Hir, as part of his general scheme of agricultural ins., that each of its branches should be so far under Gov. control as that, if found to work successfully, it should, in the end, be made compulsory ; hence he desired to render the details of each branch of ins. so complete that private enterprise would have no chance of competing in the same line. In this view he considered the following regulations essential: 1. The proprietor or cultivator should be under obligation to insure the whole value of the property exposed to risk—the whole of his crops, grass, grain, fruit-trees, vines, wood, and agricultural produce whatsoever against the risk of hail. 2. Where the loss was less than *one-tenth* part of the total value of the same kind of crop, there should be no indemnity ; and where the loss was in excess of that amount, it should always be first deducted. This rule only to apply to each class of produce ; not to the total value of all the agricultural stock. 3. The risk of the breakage of glass in greenhouses, etc., should be included.

1865.—We have some details of the transactions of several of the hail ins. cos. of France this year, viz :

	Sums insured.	Premis.	Losses beyond premis.
Cie. d'Assurances Générales.....	£3,735,139	£55,393	£12,244
Caisse Mutuelle	1,042,656	10,614	15,490
Le Province	426,394	3,314	85
L'Iris	280,963	2,844	290
La Lorraine	280,290	2,132	23

The first co. was proprietary. The others mutual. The first co. paid no less than 2979 claims in the year.

1866.—There were 11 cos. transacting hail ins. in France this year ; 9 of these were mutual, and 2 proprietary. With one exception they were all located in Paris.

1867.—The Hail Ins. Co. of France insured about £10,000,000 stg. against the hazards of hail in the Departments of France. The losses were very considerable. It was stated as much as 14s. 6d. p. £100 insured.

As a consequence of the losses of this year, the Hail Ins. Co., *Compagnie d'Assurances Générales* (we believe an offshoot of the important fire and life co. of the same name), passed into liquidation. It started in 1855 with a paid-up cap. of 2,000,000 fr. (£80,000), the nominal cap. being 10,000,000 fr. (£400,000). Twelve of the 18 years of its existence had shown losses beyond income. The Co. sustained losses in the years 1859 and 1861 to the extent of 5,600,000 fr. (£224,000), which obliged them in 1860 to call up two million fr. of the cap., and a further 3 million in 1862. *L'Abeille* was now the only joint-stock co. transacting hail ins. in France.

The preceding details regarding Hail Ins. in France are more complete, in a scientific point of view, than those possessed by any other country ; and yet, as we have seen, the bus. has not been conducted successfully there. What can be the cause ? It is certain that the only selection against the cos. which can be made is in regard to *location*—that is to say, assuming the French cos. do not accept proposals after a given date in any season. The subject will be further considered from this point of view under general title HAIL INS.

Most of the associations in the following table are mutual, and in some there is a stipulation that the contributions of the members shall not exceed 1 fr. p. 100 on the sums insured by them.

The following is a Table of the Hail Ins. Asso. of France, past and present.

Date of Estab. of Co.	Name of Co.	Location.	Nature of Business, Fate, etc.
1823	La Cérés	Paris	Mut. Hail. Existing.
1826	La Société de Toulouse	Toulouse	Ditto ditto
1829	La Société de Seine-et-Marne	Melun	Ditto ditto
1831	L'Aisne	Laon	Ditto ditto
1834	L'Etoile	Paris	Ditto ditto
"	La Versaillaise	Paris	Ditto ditto
1835	Union Général de Sociétés contre la Grêle	Lille	Ditto Died out
1843	Ligérienne Tourengelle	Tours	Hail, cat., etc. Died out
1844	L'Iris	Paris	Mut. hail. Existing.
"	La Province (founded at Toulouse)	Paris	Ditto ditto
"	L'Amicable	Perigueux	Ditto Died out
"	La Drouaise	Dreux	Ditto ditto
1853	Le Trésor de l'Agriculture	Paris	Hail, cat., fire, etc., Exist.
1854	Société d'Assurances Mutuelles	Paris	Mut. hail. Died out.
"	L'Eure	Evreux	Ditto Existing.
"	La So. de Seine-et-Oise	Paris	Ditto ditto
"	La Garantie Agricole	Paris	Ditto ditto
"	La Beauceronne vexinoise	Dreux	Ditto ditto
1855	Cie. d'Assurances Générales	Paris	Propr. Wound up 1867.
?	L'Alliance Rurale	Paris	} All existing and died out before this date.
?	L'Arc-en-ciel	Paris	
?	La Royale	Paris	
1856	L'Abeille	Paris	Propr. hail, cat., etc.
1857	La Ruche du Pas-de-Calais	Arras	Mut. hail. Existing.
1861	La Culture	Paris	Ditto ditto
1862	La Lorraine	Nancy	Ditto ditto
1872	L'Union Agricole	Paris	Mut. hail. Existing.
1873	La France Agricole	Paris	Ditto ditto
"	La Maissonneuse	Bordeaux	Ditto ditto
"	L'Union des Propriétaires	{ Oloron- Sainte-Maire }	Ditto ditto
1875	La Minerva	Paris	Ditto ditto
?	La Confédération Agricole	Dreux	Ditto ditto
?	La Gaule	Bordeaux	Ditto ditto
?	L'Amicale	Perigueux	Ditto ditto
?	La Grêle	Toulouse	Ditto ditto
?	La Régionale du Nord	Laon	Ditto ditto
?	La Picardie	Amiens	Ditto ditto

There thus appeared to be at the end of 1876, 28 existing hail ins. asso.: 27 mut. ; 1 proprietary.

Horses and Carriages, Ins. of.—See *Carriage Ins.*

Industrial Ins.—Under the law of 11 July, 1868, a twofold system of Industrial Ins. was inaugurated in France, viz. 1. For Accident Ins., already explained in detail under sub-heading *Accident Ins.* in this art. 2. For Life Ins. for sums not exceeding 1000 fr. (£40), already explained under sub-heading *Gov. Ins.*

Inland Transit (or Transport) Ins.—Ins. of goods and merchandize transported overland by means of railways, canal boats, and otherwise, forms a very important branch of the ins. bus. of France; but this is conducted entirely by the marine ins. cos. No special transit ins. offices have been founded so far as we are aware.

A great deal of the silk brought from *China*, *India*, and *Japan*, and consigned to Eng., is understood to be regularly transmitted from *Marseilles* to *London* by overland route. During the recent war with Germany some goods so conveyed and insured were captured by the enemy, and the underwriters were called upon to indemnify. This branch of ins. will be considered in detail under general title of INLAND TRANSIT INS.

Insurance Journals (France).—The journals coming under this designation are not ins. newspapers in the ordinary sense. They contain very little personal news, or gossip on current topics; but are rather devoted to questions of practice, arising out of judicial decisions under F. pol., and other intricacies of French law. They rarely contain any advertisements; and in this sense are entirely independent of the cos. Not indeed that giving value, in the shape of publicity, for reasonable payment, ought to interfere with their independence. We give a brief outline of the hist. of each. The subs. is generally from 12 fr. to 15 fr. p.a.

Journal des Assurances, 1830.—This was orig. founded by MM. Grün et Joliat,

"*Avocats à la Cour Royale de Paris*," under the title of *Journ. des Assurances, ou recueil des Lois, Ordonnances, Règlements, Arrêts, Jugemens, Statuts, etc., relatifs aux Assurances*.

1840.—The journal was discontinued this year.

1849.—The publication was recommenced, under the title of *Le Journal des Assurances Terrestres, Maritimes, Sur la Vie, etc., Legislation, Doctrine, Jurisprudence*. The editorial staff consisted of Mons. Louis Pouget, Avocat; M. Lombard, Ancien Avoué; M. Morise, Avocat à la Cour d'Appel.

1870.—M. Badon Pascal, F.I.A., Avocat, became its ed.; its title now being: *Journal des Assurances, Recueil des Documents Officiels, Lois, Sociétés, Jurisprudence, Statistique*. This is an ably conducted and useful publication.

Revue des Assurances, 1844.—This journal was commenced to be pub. by J. Dubroca, under the title of *Revue des Assurances, ou recueil des questions théoriques et pratiques, des Lois, Ordonnances, Jugemens, Arrêts, et Règlements en Matières d'Assurances*. The pub. was continued for some years. (See 1874.)

Journal de l'Assureur et de l'Assuré, 1848.—This journal was commenced by its present Ed., M. Le Hir, "Avocat, Docteur en Droit," under the title of *Journal de l'Assureur et de l'Assuré des Armateurs, Frères, Affrèteurs, Capitaines de Navires, Chargeurs, etc., et du Commerce Maritime, Assurances Terrestres et Maritimes, Sur la Vie, Tontines, etc., Droit Commercial, Doctrine et Jurisprudence*.

1877.—The journal continues to be pub. by the same ed. Its full title is now *Journal de l'Assureur et de l'Assuré, Assurance contre l'Incendie, la Grêle, contre la Mortalité du Bétail, contre les Accidents, Sur la Vie, Tontines, etc. Recueil Mensuel de Législation, de Statistique, de Doctrine et de Jurisprudence*.

L'Echo des Assurances, 1860.—This journal, which is understood to be the organ of the mut. ins. asso. of France, was founded by Mons. E. Dehais, the author of a useful little book: *L'Assurance sur la Vie en France, et les Tontines*. The full title of the journal is: *L'Echo des Assurances recueil mensuel des décisions Législatives, Judiciaires ou Administratives concernant les Assurances*.

Le Moniteur des Assurances Revue Mensuelle, 1869.—M. Eugène Reboul was the founder and first Editor.

1873.—On M. Reboul becoming Man. of *L'Atlas*, the editorship was trans. to M. Alfred Thomereau, who still occupies the ed. chair.

This journ. had a very able staff of contributors.

Gazette des Assurances, 1870, commenced in July of this year. There were then 5 other ins. journ. in existence, which we have enumerated. In the preface was the following:

That which is passing in foreign countries is too often ignored. We think it both interesting and instructive to follow the march of insurance in neighbouring countries or in those beyond the seas. We shall pub. a foreign correspondence, which will greatly interest our readers. We have secured the co-operation of competent, we might say celebrated, men in Germany, as well as in England.

Its style is sprightly, as indeed is usual with the French ins. journ. It intimated that several of the then existing journals barely paid expenses; it therefore required some courage to found another. It said, also, "In Germany and Eng. the insurance journals are numerous and are read; they are well done (*bien faits*)."

Revue des Assurances, 1874, commenced to be pub. early this year. It appears monthly, and is written in a popular style, calculated to suit a large class of readers. It is understood to represent the interests of Brit. ins. offices.

L'Argus, 1877.—Founded this year under the full title of *L'Argus Journal international des Assurances Incendie, Maritimes, Vie, Accidents, Grêle, Mortalité du Bétail, etc., etc. Une livraison par mois. Revue Financière*. Manager, Mons. Ad. Avy. This is a very useful pub., giving a list of the various ins. asso. of the Continent of Europe and the U.K., apparently with accuracy; and recording the prices of their shares, etc.

L'Assurance Français et Etrangère, 18 . This is a weekly ins. journ. of recent estab. regarding which we have no precise information.

Journal des Actuaire Français, 1872.—This journal belongs to a different category to those previously named. It is the organ of the Cercle des Actuaire Française, and contains a series of valuable papers contributed by the members of that body. See sub-heading *Life Contingencies*.

Insurance Literature.—The following works, with those mentioned in the various other sections of this art., will present, in a reasonably complete form, we believe, the Ins. Literature of France. There have been various eds. of *Le Guidon*, as also of the *Consulat de la Mer*, and of other maritime codes, and sea laws, which we have not specifically enumerated, as there have also been reprints of the works of other nations on marine ins., which are also not enumerated.

1571.—There was pub. at Rochelle an ed. of Pierre Garcie de Ferrande's *Le Grand Routier, Pilotage, et Encrage de Mer*; first pub. in 1542. Later eds. were pub. at Rouen, 1584, 1601, 1607, 1622.

1584.—There is believed to have been an ed. of *Le Guidon* pub. in Rouen as early as this year.

1647.—M. Cleirac pub. at Bordeaux: *Us et Coutumes de la Mer, contenant les Jugemens d'Oleron, Ordonnances de Wisburg, de la Haise Teutonique, et autres Pièces*. Another ed. 1661, see CLEIRAC.

1671.—M. Cleirac pub. at Rouen: *Les us et coutumes de la Mer, divisées en 3 pts.*: 1. de la Navigation; 2. du Commerce naval et Contrats Maritimes; 3. de la Jurisdiction de la Marine.

1675.—There was pub. in Paris by M. Savary: *Le Parfait Négociante, ou Instruction générale pour ce qui regarde le Commerce des Marchandises des France*. This work, which has been translated into almost every European language, contains much information regarding marine ins. The 2-vol. ed. of 1777 is considered the best.

1681.—*Ordonnance de Louis XIV. donnée à Fontainebleau au mois d'août 1681, touchant la Marine*.

1685.—There was pub. at Orleans by Mons. L. von Campe: *De Assuranceionibus*.

1708.—Mr. Pierre Remond de Montmort pub.: *Essai d'Analyse sur les Jeux de Hazard*. A work which has engaged much attention in Europe. See CHANCES, DOCTRINE OF.

1714.—*Ordonnance de la Marine du mois d'août 1681. Commentée et conférée sur les anciennes Ordonnances, le droit romain et les nouveaux réglemens*.

1758.—M. Vattel pub. in Neufchatel his now famous work: *Droit des Gens, ou Principes de la Loi Naturelle*; wherein reference is frequently made to the subject of Marine Ins.

1760.—M. René-Josué Valin pub. his now famous work: *Nouveau Commentaire sur l'Ordonnance de la Marine du mois d'août 1681*.

1763.—M. Valin pub. a work on the Law of Marine Prizes.

1766.—M. Messance pub. in Paris: *Recherches sur la Population des Generalités d'Auvergne, de Lyon, de Rouen, et de quelques provinces et villes du Royaume, avec des reflexions sur la valeur du bled tant en France qu'en Angleterre, depuis 1674, jusqu'en 1764*. [PARIS.] [POP.]

1774.—There was pub. in Orleans: *Traité des contrats de louage Maritime*. 2 vols.

1776.—Mons. R. J. Valin pub. at Rochelle: *Nouveau Commentaire sur l'Ordonnance de la Marine du mois d'août 1681*. 2 vols. "Nouv. Ed. Revue, corrigée, et augmentée."

1778.—M. Moheau pub. in Paris: *Recherches et Considerations sur la Population de la France*. See sub-heading *V. Statistics*; sub-section *Pop*.

1779.—M. de Saint-Cyran pub.: *Calcul des Rentes Viagères sur une et sur plusieurs Têtes*, wherein he corrected many of the anomalies in Buffon's and Dupré St.-Maur's Tables. See sub-heading *Mort. T*.

1786.—There was pub. in Paris, by M. Groult: *Discours sur le Droit Maritime ancien, moderne, François et étranger, civil et militaire, et sur la manière de l'Etudier*. (An ed. had been pub. at Breslau in 1782.)

1794.—A work was published by Mons. A. P. Julien de Belair, bearing date "Année II.," which we presume signifies the second year of the Revolution, 1794: *Memoire sur les Assurances Agricoles: sur les avantages de l'établissement d'une Chambre d'Assurance des récoltes pour multiplier les subsistence*, etc. [This work should have been referred to under sub-heading *Agricultural Ins*. Its date lends it a peculiar interest.]

1798.—Sir Francis d'Ivernois pub. in Lond.: *Des Causes qu'ont amené la Revolution du 4 Septembre et de ses Resultats*, etc. See sub-heading *Vital Statistics*; sub-section *Population*.

1799.—The same author pub.: *Tableaux des Pertes que la Revolution et la Guerre ont causée aux Peuple François*.

1801.—Mons. S. A. Parisot pub. in Paris: *L'art de conjecturer à la Loterie, ou analyse et solution de toutes les questions les plus curieuses et les plus difficiles sur ce jeu, avec des tables de combinaison et de probabilités*.

1802.—Herr von G. F. Martens pub. at Gottingue: *Loix et Ordonnances des diverses puissances Européennes concernant les Assurances, etc., depuis le milieu du 17^e siècle; accompagnées de quelques observations explicatoires*, vol. i. France.

1803.—M. Boucher pub. in Paris: *Institution du droit Maritime, ouvrage complet sur la législation maritime, ayant pour base l'Ordonnance de 1681, à laquelle sont adaptées les lois de l'ancien et du nouveau régime; des réflexions, des jugemens étayés des autorités les plus respectables*, etc.

1808.—Mons. J. L. La Grange pub. in Paris: *Leçons sur le Calcul des Fonctions, servant de commentaire et du supplément à la Théorie des Fonctions analytiques*.

During this year also M. Boucher pub. an ed. of the *Consulat de la Mer*. [CONSOLATO DEL MARE.]

1809.—M. Sanfourche-Laporte pub. in Paris: *Le nouveau Valin, ou code Commercial Maritime. Revu et approuvé par P. B. Boucher*.

1810.—Mons. Estrangin pub. in Paris an ed. of Pothier: *Traité du Contrat d'Assurance, avec un discours préliminaire, des notes et un supplément*.

Same year, Mons. D. A. Azuni pub. in Paris: *Origine et Progrès du droit et de la législation maritime, avec des observations sur le Consulat de la Mer*.

Same year M. Parisot pub. in Paris: *Traité du Calcul conjectural, ou l'art de raisonner sur les choses futures et inconnues*. [PROBABILITY.]

1812.—La Place pub. his great work: *Théorie Analytique des Probabilités*. This and his other pub. will be noticed fully under gen. title PROBABILITIES, MATHEMATICAL THEORY OF.

1821-3.—Mons. P. S. Boulay-Paty pub. in Rennes and Paris: *Cours de droit Commercial Maritime d'après les principes et suivant l'ordre du Code de Commerce*. 4 vols.

1822.—Mons. T. F. Lacroix pub. in Paris: *Traité élémentaire du calcul des probabilités*.

1823.—M. Grémilliet pub. in Paris: *Nouvelle Théorie du Calcul des Intérêts simples et composés, des Annuités, des Rentes, et des Placements viagers*.

1824.—There was pub.: *Recherches Statistiques sur le Ville de Paris, et le Département de la Seine; Recueil de Tableaux dressés et réunis d'après les Ordres*. This work we believe relates more particularly to the mort. experience of members of friendly sos.

Same year there was pub. in Paris: *Considérations sur les Enfants Trouvés dans les principaux États de l'Europe*. The contents of this work will be referred to under our gen. title INFANT MORT.

1825.—There was pub. in Paris by M. Juvigny: *Coup-d'œil sur les Assurances sur la vie des Hommes, suivi de la comparaison des deux modes d'Assurances, Mutuelles et à primes, contre l'incendie; terminé par une notice historique et critique sur la Caisse Lafarge*. 4th edition.

Also in the same year he pub. in Paris: *Moyen de supplier par Arithmétique à l'emploi de l'Algèbre dans les questions d'Intérêts Composés, d'Annuités, d'Amortissement, etc. Terminé par une application spéciale du même procédé à l'extinction de Dette Publique*.

Same year there was pub. in Paris a French ed. of Benecke par M. Dubernad: *Traité des principes l'indemnité en matière d'Assurances Maritimes et de grosse aventure sur navires et marchandises, etc. Traduit (de l'anglais) et augmenté d'un Commentaire, où le système de l'auteur est analysé et appliqué aux dispositions du Code de Commerce et aux usages établies en France*. 2 vols.

1828.—Mons. Quenault pub.: *Traité des Assurances Terrestres, suivi de deux Traités traduits de l'Anglais, le premier de l'Assurance contre l'Incendie, et le second de l'Assurance sur la vie des hommes*.

Same year there was pub. by MM. Grün and Joliat, Avocats, *Traité des Assurances Terrestres et de l'Assurance sur la vie des Hommes, suivi d'un Appendice renfermant les statuts des principales compagnies Françaises d'Assurance, et les polices des principales compagnies Françaises et Étrangères*. A work which was of service to those engaged in the bus. of ins. at this date, and for some years later.

These gentlemen also founded the *Journal des Assurances* in 1830.

1829.—Mons. B. A. Boudousquière pub. in Paris: *Traité de l'Assurance contre l'incendie, suivi des statuts, des polices et des tarifs des Compagnies d'Assurance établies à Paris*.

Also this year an ed. of Valin's Commentary, *Avec des notes coordonnant, le commentaire et le Code du Commerce*, par Mons. V. Becane.

1830.—About this date the *Manuel du Sapeur-Pompier* was pub. in Paris by Col. A. J. B. de Plazanet. Braidwood declared (1830) that this little book should be "studied by every one taking an interest in such estab."

1835.—M. Eugène Persil pub. in Paris: *Traité des Assurances Terrestres, suivi des statuts de diverses Compagnies d'Assurance*.

1836.—Mons. Alfred de Courcy pub. in Paris an ed. in French of Bailly's *Doctrine of Life Annu.*, etc., under the following title: *Théorie des Annuités Viagères et des Assurances sur la Vie, suivi d'une collection de Tables relatives à ces Matières; par Francis Bailly. Traduit de l'Anglais par Alfred de Courcy et publié par la Compagnie d'Assurances Générales sur la Vie*. 2 vols. 8vo.

1837.—M. Gabriel Lafond, "Directeur de la Compagnie d'Assurances Maritimes, l'Union des Ports," pub. in Paris: *Guide de l'Assureur et de l'Assuré en Matières d'Assurances Maritimes. Suivi de Tableaux Comparatifs des principales stipulations des polices d'Assurance de toutes les villes de commerce du globe et des risques garantis par elles*. (See 1855.)

1838.—Mons. J. Delaborde pub. in Paris: *Traité des Avaries Particulières sur les Marchandises, dans leur rapport avec le contrat d'Assurance Maritime*. 2nd ed.

Same year M. Bravard-Veyrières pub. in Paris: *Notions préliminaires à l'explication du droit Maritime*.

1839-40.—Mons. A. Beaussant pub. in Paris: *Code Maritime ou lois de la marine marchande, administratives, de commerce, civiles et pénales, réunies coordonnées et expliquées*. 2 vols.

1841.—Mons. G. Sautayra pub. in Paris: *De l'Assurance contre l'Incendie, avec un Commentaire sur chacun des articles des conditions générales imprimées sur les polices délivrées par les Compagnies; précédé d'une introduction sur les assurances en général*.

Same year Mons. A. A. Cournot pub. in Paris: *Traité élémentaire de la Théorie des Fonctions et du Calcul Infinitesimal*. 2 vols. 8vo. (See 1843.)

1843.—M. Isidore Alauzet pub. in Paris: *Traité Général des Assurances: Assurances Maritimes, Terrestres, Mutuelles, et Sur la Vie*.

Same year, Mons. C. Lemonnier pub. in Paris: *Commentaire sur les principales Polices d'Assurance Maritime usitées en France*. [Paris, Bordeaux, Marseille, le Havre, Rouen, Dunkerque, Bayonne.] 2 vols. 8vo.

Same year, Mons. A. A. Cournot pub. in Paris: *Exposition de la Théorie des Chances et des Probabilités*. (See 1841.)

1844.—Mons. L. B. Hautefeuille pub. in Paris: *Code de la Pêche Maritime ou Commentaire sur les Lois et Ordonnances qui régissent la Pêche Maritime*. (See 1852.)

1845.—Mons. J. M. Pardessus completed his great work: *Collection de Lois Maritimes antérieures au xviii. Siècle*, in 6 vols., the first of which he had published in 1825. The object of this work is to bring into one view all the early maritime codes of the world. In the prosecution of this pub. the author received liberal aid from the National Exchequer of France.

1846.—M. Le Vte. De Romanet pub. in Paris: *Des Pensions Viagères pour les Vieillards des classes ouvrières, et des diverses Institutions de Prévoyance qui existent déjà en France et en Angleterre*.

1848.—Mons. Charles Gouraud pub. in Paris: *Histoire du Calcul des Probabilités depuis ses origines jusqu'à nos jours*.

Same year, M. Morel pub. in Antwerp: *Manuel de l'assuré ou vade-mecum du commerce maritime, et plus spécialement des clients du bureau centrale et continental des assurances maritimes de Paris*.

1850.—M. Louis Pouget pub. in Paris: *Manuel de l'agent d'assurances pour le recouvrement des primes d'Assurances terrestres en justice*. (See 1855.)

Same year (?), a "Mémoire" on Insurable Interest by M. Guinet, Avocat à la Cour d'Appel de Paris.

1851.—M. de Watteville pub. a work on the *Benevolent Institutions of France*.

1852.—Mons. G. Hubbard pub. in Paris: *De l'Organisation des Sociétés de Prévoyance, et des bases scientifiques sur lesquelles elles doivent être établies*.

He also pub. in the same year: *Mémoire sur l'Histoire et l'Organisation des Sociétés de Secours Mutuelles*.

Same year, Mons. L. B. Hautefeuille pub. in Paris: *Décret disciplinaire et pénal du 24 Mars 1852 expliqué et commenté*. (See 1844.)

1854.—Mons. A. P. Violeine pub. in Paris: *Nouvelles Tables pour les calculs d'intérêts simples et composés, d'amortissement, d'annuités de primes, etc.*, 1 vol. 4to. (See 1859.)

Same year, there was pub. in Paris by Mons. C. B. Merger: *Réflexions sur les effets de la liquidation des Compagnies anonymes d'Assurances à primes contre l'incendie à l'occasion de la faillite du Palladium*. (See 1858.)

1855.—Mons. G. de Lurey Lafond pub. in Paris: *Guide général des Assurances Maritimes et Fluviales*. (See 1837.)

Same year, M. Louis Pouget pub. in Paris: *Dictionnaire des Assurances terrestres: principes, doctrine, jurisprudence, statistique, économie, de l'assurance, concordance des polices françaises avec les polices et les codes étrangers, analogie avec les assurances maritimes et fluviales*. 2 vols. imp. (See 1850 and 1858.)

1857.—M. Caumont pub. at Havre: *Dictionnaire universel du droit Commercial maritime ou répertoire méthodique et alphabétique de législation, doctrine et jurisprudence nautiques avec sommaires et tables*, 2nd ed. Herein is contained much that is of value in regard to marine ins.

1858.—M. Louis Pouget pub. in Paris: *Principes de droit Maritime, suivant le Code du Commerce Française. Analogie avec les Lois au Codes étrangers. Assurances, Capitaine Armateur, Contrat, à la grosse, affrètement, fret, connaissance, abordage, consuls, etc. etc. Usages et Ventes Maritimes, etc. etc.* 2 vols. (See 1855.)

Same year there was pub. in Paris by Mons. C. B. Merger: *Des assurances terrestres, traité théorique et pratique comprenant les assurances sur la vie à primes fixes, en mutualité, et contre l'incendie—les risques de Transport par chemins de fer—la Grêle, l'Épidémie, etc.* Vol. i. (See 1854.)

1859.—M. Ernest Frignet pub. in Paris: *Traité des Avaries, communes et particulières, suivant les diverses législations maritimes*.

Same year Mons. E. Dufour pub. in Paris: *Droit Maritime. Commentaire des titres I. et II., livre II. ou Code de Commerce*. 2 vols.

Same year M. Eugène Pereire pub. in Paris: *Tables logarithmiques pour le calcul de l'intérêt composé, des annuités et des amortissements*. (See 1860.)

Same year, Mons. A. P. Violeine pub. in Paris: *Tables pour faciliter les calculs des probabilités sur le vie Humaine, tels que rentes viagères, assurances, etc.; d'après les lois de Mortalité de Deparcieux, Duviillard, et d'une moyenne entre ces lois, etc.* 1 vol. 4to. (See 1854.)

1860.—MM. H. Eloy et J. Guérard pub. in Paris: *Des capitaines, maîtres et patrons, ou traité de leurs droits et obligations au point de vue commercial, civil, administratif, et pénal, et dans leurs rapports avec les armateurs, chargeurs et assureurs d'après les lois, la doctrine, les règlements, les usages et la jurisprudence des cours et des principaux tribunaux de commerce*. 2 vols.

Same year, M. Negrin pub. at Aix: *Du droit d'appel limité à quinze cents francs, surtout en matière d'Assurances Maritimes*.

Same year M. Eugène Pereire pub. in Paris: *Tables de l'intérêt composé des annuités et des rentes viagères*.

1861.—Mons. E. Agnel pub. in Paris: *Manuel générale des Assurances; ou guide pratique des Assureurs et des Assurés, avec l'exposition méthodique de leurs obligations et de*

leurs Droits respectifs, d'après la Législation, la Jurisprudence, l'opinion des Auteurs, les Statuts et les Polices des Compagnies d'Assurances, comprenant les Assurances contre les Accidents, les Faillites, la Gelée, la Grêle, l'Incendie, l'Inondation, Mortalité des Bestiaux, les chances du Recrutement, les procès, les risques Maritimes, et les Assurances sur la Vie.

1862.—Mons. J. V. Cauvet pub. in Paris: *Traité sur les assurances Maritimes, comprenant la matière des Assurances, du contrat à la grosse et des avaries.* 2 vols. 8vo.

1863.—Mons. A. Laguepierre pub. in Paris: *Guide de l'Assureur; ou Manuel pratique de l'Assurance contre l'Incendie.* "6th ed. revue et augmentée." 18mo.

Same year M. Reboul pub.: *Etudes sur les Assurances. Assurances sur la Vie, Part i.*

1865.—M. Maas pub. in Paris: *Théorie élémentaire des Annuités Viagères et des Assurances sur la Vie.*

1867.—There was pub. in Paris by M. Léon-Adrien de Montluc: *Des Assurances sur la vie dans leur Rapport avec les Principes du Droit Civil, du Droit Commercial et les lois de l'Enregistrement.* A work of considerable interest. 2nd ed. 1870.

Same year M. Ernest Beauvisage pub. in Paris: *Des Tables de Mortalité, et de leur application aux assurances sur la vie (Rentes viagères et capitaux payables au décès); avec une nouvelle table de mortalité dressée d'après les décès constatés dans la Tontine Lafarge, et la traduction des lois anglaises de 1853 et de 1864 sur les assurances et les rentes viagères de l'état.*

1869.—There was pub. in Paris by M. Hippolyte Charlon: *Théorie Mathématique des opérations Financières.*

1870.—M. Léon-Adrien de Montluc pub. in Paris: *Des Assurances sur la Vie dans leur Rapport avec les principes du droit Civil, du droit Commercial, et les lois de l'Enregistrement.*

1872.—M. Desmarests pub. in Paris: *Législation et Organisation des Sociétés de secours mutuel.*

1876.—Mons. d'Anselme pub. in Paris: *Le Crédit Maritime Français en face de l'Assurance et de la loi.*

The following works have also been pub.; but we are uninformed as to date of pub.:

Par M. Beautemps: *Nouveau Manuel du Capitaine au long cours et du maître au Cabotage en Matière d'assurance maritime.*

M. de Courcy: *Précis de l'Assurance sur la Vie.*

M. Dehais: *L'Assurance sur la Vie en France.*

M. Podio: *Questions d'Assurances Maritimes.* 2 vols.

M. Sibille: *Traité de l'abordage. On trouve dans cet ouvrage de points doctrine qui intéressent l'assureur et l'assuré.*

The modern Life Ins. literature of France is unique. It is mostly of a philosophic character; but is based upon a strong substratum of economic and social considerations. The whole subject is forcibly presented. Ins. is a duty which every man owes to himself. It may in certain events be useful to those who follow. On the whole, then, it is prudent to be insured. The selection of the particular method must be in accordance with the probable requirements of each particular individual. It is a terrible thing to be without means, especially in old age. See how ins. may best be applied to guard against such a calamity—such a disgrace!

Life Contingencies.—The science of Life Contingencies can hardly be said to have received any great development in France. The two best known writers upon this subject are St.-Cyran and Deparcieux. On the other hand, the science of social statistics, as relating to pop., has engaged the attention of such brilliant writers as Buffon, Moheau, Messance, Neckar, Fourier, Dusejour, and many others. While, again, the theory of mathematical prob. is indebted to Condorcet and Laplace, beyond all other names associated with it. The works of the several writers named are reviewed under their appropriate heads in other portions of this work, and we do not therefore enlarge upon them here.

1872.—There was organized in Paris Le Cercle des Actuaire Française, based upon the model of the Inst. of Act. in Lond. The number of members, which was small at first, appears to be increasing; and among them are many names of considerable distinction.

Under the auspices of this society there is pub. the *Journal des Actuaire Française* (quarterly 6 fr.), first vol. 1872, and an ann. vol. since. In the journal will be found a series of papers of much interest. The So. and its journal appear likely to do as much to advance the science of Life Contingencies in France as the Inst. of Act. and its Journ. have done for the science in Gt. Brit. We wish these illustrious organizers every possible success.

See sub-heading *Ins. Literature.*

Life Ins. (Assurances sur la Vie).—The hist. of the introduction and development of Life Ins. in France is surrounded with many remarkable incidents. We are not aware that there exists anything more than fragmentary materials by way of record, written at different times, by different persons, for varying purposes. All we shall attempt to accomplish here will be to bring into chronological order the main facts: leaving the skeleton thus created to be clothed by some one located upon the scene wherefrom alone the complete materials may be obtained.

The legal requirements for the estab. of a *Société Anonyme* for the bus. of Life Ins. are, and always have been, of a most stringent character. These will be given in chronological form under sub-heading *Regulations*, etc. There appear, however, to have been founded quite a number of *mutual* asso. undertaking the bus. of Life Ins., but having no legal authority for so doing. To obtain anything like a complete record of these appears almost impossible.

15th Century.—The earliest work treating of ins. in France is a publication known as *Le Guidon*, which is believed to have been pub. in Rouen during the 15th century. It treats mainly of marine ins.; but in chap. 16, art. 5, it mentions life ins., observing that while it was practised in other nations, it was prohibited to insure the lives of persons in France, as *contra bonos mores*, and capable of giving room to an infinity of abuses and frauds: by reason of which, indeed, some of those other nations had been obliged to discontinue it. There are various editions of *Le Guidon*, and we are not certain at what precise date this statement was first made.

1783.—Emerigon's famous *Treatise on Insurances* was first pub. this year, and therein (chap. 8) treating "of the things that may be insured," he first mentions "Lives of Men;" but only to declare that, while at Naples, Florence, in England, and various other places, it was permitted to make such ins., they were in fact only wagers, and as such had been prohibited in Holland, "and in several other countries." "From an early period they had been prohibited in France. This prohibition was renewed by the Ordin. Man cannot be estimated at a price, says the law: *Liberum corpus estimationem non recipit*. The life of man is not an object of commerce; and it is odious that his death should form matter of mercantile speculation: *Nefas est ejusmodi casus expectare*. . . . These ins. then are absolutely void: the premis. they stipulate are not legally payable; if paid, it may be redemanded at law; neither is the half per cent. for signature due." [LIFE INS., HIST. OF.]

1787.—The first serious movement in France in favour of Life Ins. was made this year, in an endeavour to estab. the *Compagnie Royal d'Assurances sur la Vie*. The promoters had to apply to the King for the proper authorization. This they did with such effect, or under such influential auspices, as to induce H. M. to appoint a commission to rep. upon the general question of the practice of Life Ins. in other parts of Europe; but more especially in Gt. Brit. The results appear in the shape of an *Arrêt du Roi Louis XVI.*, promulgating a Decree of the Conseil d'Etat under date 3rd Nov. this year as follows:

The King, having had a report made to him as to the nature and principles of different estab. founded in Europe, under the name of *Assurances upon Life*, has observed that they possess valuable advantages; that if naturalized in France they would be of great utility; that a considerable number of individuals of both sexes and of all ages would find therein a facility for insuring upon their lives, or for terms of their lives, rents or capital sums, either for themselves during old age, or, after them, in favour of the survivors to whom they would wish to leave resources or benefactions; that these descriptions of ins., if fixed at a moderate and equitably arbitrated rate, would release from the usury which is too common the sale of every kind of capital and of annuity, or would extend enjoyment of them to survivors; that, finally, these various combinations, usefully binding the present to the future, would re-animate those feelings of affection and of reciprocal interest which make the happiness of society and augment its strength. These united considerations have convinced H. M. of the usefulness of an estab. for assu. upon life, and have decided him not to defer it any longer. But the more the advantages of it have appeared precious, the more it has seemed important to H. M. to make those advantages secure. H. M. might have abandoned the matter to the different cos. which have presented themselves; but under existing circumstances, he would have feared, by multiplying the cos., to open a new course to a false and pernicious bus. which it is needful to repress.

H. M. has, moreover, been informed that competition became *hurtful* to this kind of inst., in those countries where they were exposed to it at their foundation; their success, in fact, cannot be more efficaciously assured than by the prompt uniting of a multitude of chances; and, although these ins. should be calculated so as to derive their complete security from the union of chances, the King has thought it useful to submit those who will be charged with the conduct of this estab. to a considerable financial engagement, in which each of the insured will have an authentic guarantee of the contracts entered into with him. Neither has H. M. deemed that the utility to his finances, which he might derive, at present and in future, from this estab., should be neglected. Finally, in order to conciliate all interests with the precautions which may estab. confidence, he has judged it to be expedient to confide to a public and enlightened administration, like that of his good city of Paris, the surveillance of this estab. and to authorize to concede, in the name of H. M., the exercise of this privilege to the Co. for Ins. against Fire, estab. by decree of the 6th November last, which Co. has already presented its submission in that respect, and to which alone H. M. purposes granting, during 15 years, the exercise of the said privilege. This surveillance, whilst it will preserve to individual interest the activity which is necessary to it, will leave nothing to be feared on the score of any doubtful, reprehensible, or hazardous speculation; and the known zeal of the administrators of the city of Paris for all that interests the good of the State and the service of H. M. will be further stimulated by H. M.'s disposition to apply the profit resulting from the said estab. to the particular expenses of the city of Paris, which were or should be borne by the Royal Treasury.

Wishing to provide for which—having seen the said submission, signed De Gesmes—having seen the requisition of the Procurator of the King and City, and the official deliberation dated 25th Oct. last—having heard the Rep. of the Sieur Lambert, Councillor of State and Ordinary to the Royal Council of Finances and Commerce, Comptroller-Gen. of the Finances; the King, in Council, has ordered and orders as follows.

The 13 conditions of the concession are then given. A summary of their contents will suffice.

1. The concession was to be perpetual, but not exclusive, except for the first 15 years.
2. The town of Paris to have perpetual right of inspection, and the King to be represented at boards, etc., by a special commissioner.

3. The capital to be 8 millions of livres, in addition to the 8 millions raised as the cap. of the fire ins. branch.
4. The 16 millions were to be paid in at the Hotel de Ville—four millions to be invested in *effects royaux*, to be chosen by the Co., and the remaining 12 millions in acknowledgments of the Royal Treasury. Int. on the latter to be paid to the Co. every 6 months, at the rate of 5 p.c.
5. The 16 millions so invested to remain in deposit in an iron chest at the Hotel de Ville, shut with three different keys; one key to remain there, the second in the hands of the cashier of the Co., and the third in the hands of one of the managers.
6. Eight millions out of the 16 to form the Fire ins. guarantee, and the remaining 8 millions to remain the guarantee of the Life assu., until perfect fulfilment of the engagements entered into by the Co.
7. In case of the Co. being obliged to have recourse to its capital, it is bound to replace all the money taken from it within a month at latest, and by call or otherwise; the intention being that the capital should be permanent, and that the Co. should, when called upon, prove it to the appointed commissioner.
8. *The prospectus, policy forms, calculations, etc., to be approved by the King.*
9. The bye-laws and rules for administration to be similarly approved.
10. A net fourth of the profits to be ceded to the town of Paris.
11. Foreigners to be allowed to insure without payment of the *droit d'aubaine*.
12. Regulates the style or title of the Co., and the right to have a common seal.
13. The *Prevôt des Marchands et Echevins* of Paris to take cognizance of all the suits arising out of the bus. of the Co. to the exclusion of all courts and judges, save appeal to the Council.

For the preceding outline of this important State document we are indebted, as indeed for other facts in this art., to the ingenious researches of Mr. F. Hendriks—vide *Assu. Mag.* vol. iv. p. 349.

1788.—Under the authority of the authorization (*concession*) last named, the promoters of the *Compagnie Royale d'Assurances sur la Vie* were about to commence bus. operations; when they suddenly found themselves opposed, in what they regarded as a monopoly, by the founders of the *Chambre d'Accumulation de Capitaux et d'Intérêts composés*, which had also obtained an authorization in April of this year. [See sub-heading *Annuities*, etc.]

The matter now became referred to the Council of State. It was a repetition of the events of 1687 in England [FIRE INS., HIST. OF]. At a sitting of the Conseil d'Etat held at Versailles 27 July this year, an *Arrêt* was signed, explaining that the *Compagnie Royale* was intended to have the exclusive monopoly for 15 years of all ins. for fixed sums or annu. deferred on survivorship; but that this was not to apply to accumulation or other projects of the kind contemplated by the *Chambre d'Accumulation*; nor to the grant of immediate annu., for which branches the privileges were not to be exclusive. On the other hand, Feuchere and all others were expressly forbidden from entering into contracts which concerned ins. bus.

The promoter of *Compagnie Royale*, M. de Gesnes, had previously promoted a fire ins. co. under the same designation. But he appears to have had associated with him in the life project M. E. Claviere, whose name appears at the end of the prosp. as the *Administrateur Gérant*. On the same 27th July (1788) an *Arrêt* appeared separating the fire and life ins. branches in regard to cap. and bus., but leaving each under the representation of De Gesnes. Material alterations were, however, made as to the investment of the 16 million livres of cap. which had to be raised, and of which indeed one-half had already been lodged at the Hotel de Ville. Twelve millions, which, under the 4th condition of the first concession, were to be invested in obligations of the royal treasury at 5 p.c. int., were, instead of this, to be reimbursed by the State by the grant of life annu. at 10 p.c. upon the cap., upon the lives of such nominees as the Co. might choose. This appears very much like a forced appropriation of a large portion of the cap. by the State—recalling the events in connexion with the founding of the two great marine ins. corps. in England in 1720 [MARINE INS., HIST. OF]: except that here the transaction merely takes the shape of an annu. operation—the legal powers for enforcing payment of such annu. being, we conceive, very doubtful. The Co. was not dissatisfied with the arrangement; and indeed regarded the high rate of annu. as an indemnification for the delay incurred.

The prospectus of this Co. was a remarkable document. It comprised about 112 quarto pages—exclusive of later add. But Mr. Hendriks pronounces it to be a very readable and instructive production, written with considerable talent; and the examples it gave of the applications of which life ins. was capable were well chosen and expressed. The progress of England in the science of Life Contingencies is especially referred to—its experience appealed to, and its principles approved. "In fact, the tables, conditions and principles of the *Compagnie Royale* were avowedly derived from English sources." Some hearty encomiums were passed upon Dr. Price.

The rates of prem. charged by the Co. were high—even some 5 or 10 p.c. higher than those originally charged by the *Equitable So.* of Lond. But there appears to have been some real reason for this, inasmuch as the real mort. in France was as yet unknown;

and there were reasons for thinking that it might not be so favourable as in England. These high rates were made the pretext for much abuse of the project, and its promoter; but was mainly at the instance of a rival undertaking, which certainly erred in the opposite direction—the *Tontine Lafarge*. [See sub-heading *Annuities*.]

The *Compagnie Royale*, notwithstanding the labour taken in its organization; or the battles fought in its defence; came to a speedy and unfortunate ending. It has been variously stated that its bus. was small; and that the 5 years' existence of the estab. produced most brilliant results. It is prob. that the mean of the two statements is the more correct. It passed out of existence during the troubles of the Revolutionary period; its own misfortunes being eclipsed by the still greater troubles which overwhelmed the State.

1800.—The failure of the *Compagnie Royale* and of the *Tontine Lafarge* had a most disastrous effect upon the progress of Life Ins. in France. These incidents were followed by stirring political events: so that it may be truly said, that at this date, and for the next 15 years, Life Ins. had practically no existence in France. In the mean time it was making very effective progress in England; and it was certain that attention would be drawn to it as soon as the Continent of Europe should again enjoy the blessings of peace.

1819.—In this year signs of revival in the matter of Life Ins. became happily apparent. There was founded the *Compagnie d'Assurance Générales*, which soon took a firm root, and is now one of the most prominent ins. asso. in France; as it is the first in point of date of the existing offices. The Co. based its operations upon *Duvillard's* T. of Mort. The Council of State criticized the choice made by the Co., and averred that it was thus reserving to itself too much profit. This implies at least some understanding of the bus.: for the T. selected yielded lower rates of prem. than the *Northampton* T., then mostly in use by the Eng. cos. The Council did not persist in its objection.

1829.—*L'Union* Life Ins. Co. was founded this year by M. Maas (father of the present able inheritor of this name, spoken of hereafter), who had aided in the foundation of the *Générale*. The scheme of the new co. was almost entirely the same as that of its predecessor; with the single exception that the pol.-holders were admitted to parti. in half the profits.

The sum insured by the *Générale* up to this date was something under £240,000.

1839.—The position of 3 of the French life offices stood as follows at this date. It is the first glimpse which we obtain of actual financial results:

Name of Co.	Sums insured.	Annu. granted.	Single and ann. prems. received to this date.	Claims in the year.	Annuities closed by death in the year.
	£	£	£	£	£
Générales	235,056	44,833	381,290	1416	2092
L'Union	169,952	24,840	247,795	66	860
Royale	407,428	48,800	484,798	2850	1410
Totals	£812,436	118,473	1,113,883	4332	4362

It is seen that these cos. had, at this date, considerable annuity transactions. The purchase-money for these accounts for the large sums in col. 4 against the small amount of claims. The mort. was very light, as it always is in annu. sos.

1840.—There was pub. anon. in Paris: *Des Assurances et Associations sur la Vie*.

1841.—It was about this date that the practice of issuing *endowment* and *survivorship* pol. came into operation in France. The effect was magical. Life Ins. in its ordinary form had struggled on, and was at length beginning to make some actual progress, when the great bulk of the bus. suddenly became converted into this modified channel. The idea presented was something for *oneself*, instead of simply something for *other people*, at our expense. This new application of the *Tontine* principle to Life Ins. met in fact the exact wants of the French people. (See 1849.)

1843.—At the close of this year the position of the *Compagnie Générale* was stated to be as follows: Sums insured, £265,536; annuities, £58,029; single and ann. prems. raised in the year, £501,631; 12 claims for £2644; 61 annu. ceased by death, for £3065. The insured parti. in half the profits. The profits during the 5 years 1842-6 inclusive were £14,350. The total cap. (including guarantee fund) in 1847 was stated at £880,000.

At this date the total sums insured in *L'Union* were stated to be £134,180; and the annu. granted as being £25,817 p.a. The *new* ins. for the year were (sums insured) £24,454, and £3463 annuities—the single and ann. prems. for which amounted to £35,149. Claims for £557 had been made on the death of 9 members; and 33 annuitants, receiving together £2554 p.a., had died. At the close of this year £10,000 was distributed amongst the shareholders, at the rate of £5 p. share; £3620 among the insured; and £3760 added to the reserved fund. (See 1850.)

1844.—At the end of this year the number of members in *L'Equitable* (estab. 1841) was 22,644, insuring £757,252, giving an average p. pol. of about £33 10s.

1845.—It was stated by the Man. of *L'Equitable* at this date that the bus. of the life ins. cos. in *France* was continually increasing; and that the total subs. (prem. and purchase-money for annu.) would not be less than £7,200,000.

1846.—At this date, we have it on the authority of M. Dubroca, there were only 3 life offices which issued pol. payable on the simple event of death, although it was ordin. life pol. of this class which had been first known in *France*. The bus. had been almost entirely of the Tontine endowment class.

1847.—It was stated upon the authority of the Man. of *L'Equitable* that the "total cap. guaranteed," i.e. sums insured in *France*, in all forms, was about £16,000,000. Of this, £1,640,000 was insured in that so. Investigation showed the location of the subscribers to be:

France numbers	27,678 subs. for	.....	£1,494,256
Foreign countries	2,329	.....	133,412
Total			<u>£1,627,668</u>

An analysis of the social status of those insured in *France* presented the following results:

	No. of Subs.	Amount.
Magistrates, Clergy, Medical men, Teachers, Artists	3357	£203,544
Government officials	1384	79,770
Army and Navy	1397	135,882
Bankers and Commercial men	6518	376,492
Agriculturists	2825	115,476
Landed proprietors, etc.	2914	181,096
Working classes	5320	194,632
Domestic servants	1063	27,376
No description given	2900	179,992

27,678 £1,494,260

1849.—The system of Tontine endowment pol. introduced into *France* in 1841 had by this year developed into the proportions shown in the following T., which was compiled by M. Dubroca at this date:

Name of the Asso.	No. of Pol.	Amount insured.	Total Investments.	Ann. Income on Investments
		£	£	£
La Caisse Paternelle	57,276	3,107,792	1,116,514	52,078
La Nationale	18,632	1,823,935	934,222	42,393
La Prévoyance	59,268	2,326,559	646,317	29,629
L'Equitable	61,030	2,292,257	545,558	25,322
La Caisse des écoles et des Familles	54,628	1,750,324	536,014	25,045
La Providence des Enfants	25,066	915,119	367,501	17,021
La Concorde	21,659	799,027	250,605	12,033
L'Economie	30,642	1,011,148	203,455	8,619
La Minerve	44,667	1,058,358	169,187	8,063
Le Conservateur	8,707	232,457	70,789	3,444
L'Européenne	4,909	184,202	54,814	2,555
L'Urbaine	2,386	124,224	21,658	969
Le Phénix	1,587	98,084	26,321	1,167
La Providence	1,986	89,324	26,802	1,354
Le Soleil	928	31,671	4,332	182
La France	1,320	50,878	10,284	540
La Mélusine	283	9,253	2,217	109
L'Aigle	341	12,833	1,661	65
Totals	395,315	15,917,443	4,988,251	230,590

It is seen that these pol. averaged nearly 1000 fr. (£40) each.

1850.—At the close of this year the 18 authorized cos. had issued in their Tontine endowment classes:

409,493 pol. amounting to	£16,593,550
Of which sum there had been invested	5,759,218
Which had purchased in the Gov. funds an ann. income of...	271,902

It thus appeared that the average amount of each pol. was £40 10s.; that 34·7 p.c. of the amounts had been paid up and invested; and that the average rate of int. produced in all the Gov. funds from 1841 to this date was 4·72 p.c.

The position of the Tontine classes in *Le Phénix* Life at this date was reported as follows:

Date.	Duration of the Class.	No. of Subscriptions.	Amount of subs.	Investments made.	Ann. income in 3 p. cents.	Cost of ditto.
1846	8 years.	273	£ 10,115	£ 6,831	£ 313	£ 6,714
"	12 "	540	29,930	11,842	547	11,587
"	16 "	457	27,460	7,028	324	6,836
"	20 "	487	44,035	9,161	428	8,864
1850	20 "	42	3,560	316	15	282
Totals		1799	115,100	35,178	1627	34,283

The position of each of these classes was regarded as highly favourable. The average of the subs. was £64; and the average amount paid up was £19 for each subs.

The amount of subs. which had fallen in by death of the subs. was as annexed.

The new class opened 1 Jan. this year obtained within the year 42 subs. for £3560.

We give these details in order that the reader may understand the direction in which life ins. was being pursued in France at this date.

This year the total life fund of *La Nationale* (late *Royale*), as distinct from the fire ins. fund, was £1,680,000, viz. guarantee fund, £600,000; reserve, arising from the single and ann. prems. invested, £1,080,000. Besides these sums, the Co. had in the mut. Tontine classes existing on 31 Dec., and terminating at various periods before 1869, subs. for £1,866,437, on which the sums received and invested had been £1,051,006, producing an ann. income from the Gov. funds of £48,779.

At this date *L'Union* had a guarantee fund of £400,000, besides a fund of £320,000 arising from the investment of the prems. During 20 years' existence, besides the payment of large claims, the Co. announced that it had paid away £24,000 on life annu.

1851.—Mr. Samuel Brown read before the Inst. of Act. a paper: *Sketch of the recent Progress of the Assu. of Life and Property on the Continent* [*Assu. Mag.* vol. i. p. 293]; which we have put under contribution in the preparation of this art.

1854.—Mr. Fredk. Hendriks contributed to the *Assu. Mag.* [vol. iv. p. 349] a *Sketch of the Early Hist. of Life Ins. in France, with Translation of the "Arrêt du Roi Louis XVI." prefixed.* It is this translation which we have followed in the present art. Mr. Hendriks draws attention to the fact that at this date—35 years after the estab. of the first of the existing life offices in France—there were still but 5 in all in active operation, viz. the *Générale, Nationale, Union, Phénix*, and *Caisse Paternelle*. He, however, adds: "Only a short time ago there were 6 other cos.—the *Urbaine, France, Providence, Soleil, Aigle*, and *Mélysine*; but all these, according to a statement pub. a few months since, have given up the bus. of life ins., and have voluntarily put their offices into liquidation." Further, after a careful investigation of the question, he arrived at the opinion that the whole life ins. in force in *France* at this date did not amount to £1,000,000; "and the largest number of pol. are for short period risks, or renewable only for a very limited term." But there were, he believed, £20,000,000 stg. insured by the *Asso. Tontinières* for deferred annu. and endowments payable in the lifetime of the insured! Life Ins., as such, had still hardly any existence in *France*!

1856.—On the birth of the Prince Imperial, this year, it was stated that endowment ins. for a very large amount were effected on his life—being made payable at age 18. Thus in 1874 several millions of francs would become payable. The wisdom of such a provision had before that date become fully apparent in the altered fortunes of the family.

1859.—The amount insured in the books of the French life cos. as the result of 41 years' trading from 1819 down to this date inclusive, was ascertained to be as follows: pol. issued 35,874, insuring £12,912,000. Of these the pol. of the pure life class were 2384, and the sum insured £450,000. While the number of annu. pol., either immediate, deferred, or survivorship, had reached 26,700, insuring annu. payments amounting in the aggregate to £693,600! From this date the progress of pure life bus. has been much more rapid. (See 1868.)

There appeared this year in the columns of the *Opinion Nationale*, a series of art. on life ins., by M. Eugène Reboul, which attracted much attention, and fixed the public mind upon the subject to a degree which has resulted in a remarkable progress. M. Reboul afterwards collected these papers into a vol. and pub. them under the title,

Thoughts upon Ins. Other writers of eminence and power came forward to lend a helping hand, and now France furnishes a life ins. literature whose effectiveness, vivacity and versatility surpass, as a means of educating the masses, that of either England or America. [*Ins. Literature.*]

It was reported that during the 41 years 1819 to 1859 inclusive, there had been issued by the life offices of France pol. covering £13,360,000; and during the same period 26,700 annu. pol. securing the payment of annu. amounting to £693,600. (See 1870.)

1863.—M. Eugène Reboul pub.: *Etudes sur les Assurances. Assurances sur la Vie.* Part I. Preface by M. Alfred de Courcy.

1866.—The financial position of the 9 principal life ins. cos. of France at this date was as follows:

When founded.	Name of Co.	Amount at Risk in 1866.			Amount Assured in 1866.			Total Income in 1866.	New Premiums in 1866.	Claims in 1866.
		Total.	Whole Term Assu.	Term and other Assu.	Total.	Whole Term Assu.	Term and other Assu.			
1819	Compagnie d'Assurance Générales...	£ ...	£ ...	£ ...	£ 1,814,694	£ 1,541,245	£ 273,449	£ 251,731	£ 6,103,272	£ 67,303
1828	L'Union ...	2,000,908	1,741,710	349,198	638,967	562,226	76,741	...	...	37,204
1834	La Nationale...	1,537,300	1,406,475	70,825	...	...	...	...	66,314	37,101
1841	Caisse Paternelle...	2,602,763	...	...	400,342	...	...	...	...	11,519
1841	Le Phénix ...	1,814,553	1,059,108	755,445	522,077	390,189	131,889	99,140	...	20,344
1854	L'Imperiale ...	...	...	...	391,954	245,588	145,766	...	49,963	12,299
1857	L'Urbaine ...	450,579	402,781	47,798	538,963	420,730	118,233	...	20,109	4,971
1858	Caisse Générale des Familles ...	...	...	...	484,660	199,798	284,862	...	...	16,295
1864	Le Monde ...	...	...	...	424,983	238,686	186,297	44,390	11,476	2,198

One of the most important features of this T. is the cols. showing the proportion of term as against whole life ins. (See 1870.)

1867-8.—A Gov. scheme of life and accident ins. was set on foot. The life portion was of an industrial character. It has been sufficiently explained under *Gov. Ins.*

1868.—The total number of pol. issued by the life asso. of France for the 50 years 1819—68, reached 130,434, of which 35,845 were issued in the first 40 years, and 94,589 in the last 10 years. Of these 11,754 were life pol., and 52,463 annu. pol. There were in force at this date 76,083 pol. Of these 6320 were whole life pol., ins. £1,261,880; and 24,490 annu. pol. (immediate, deferred, or survivorship), ins. an aggregate ann. income of £656,800. Looking back to 1859, we see how the proportion of pure life bus. as compared with annu. in all forms is increasing. A table embodying these details, and later ones, in a more complete form, will be given in a later part of this art. (1870.)

1869.—It was reported that the French life offices had paid during their existence down to this date about 6800 claims, amounting to £2,320,000. The claims in 1869 were under 740 pol. ins. £332,000. The annu. ann. payable amounted to £720,000. The reserves of the life cos. against their liability under these two classes of pol. amounted to £8,800,000. During this year, 1306 annuitants died, releasing annu. of £39,560.

The prem. received during the year on 14,124 new life pol. issued, ins. £8,072,000, amounted to £281,600. The renewal prem. received amounted to £971,200; and the amount received in respect of the purchase of 3629 annu. was £890,400. The total receipts from life prem. and annu. purchases was £2,143,200.

1870.—The following important return regarding the progress of life ins. and of annuities granted by the life cos. was obtained this year:

Date.	Life Insurance.		Annuities.	
	No. of Life Pol. issued.	Amount Insured.	No. of Annuity Contracts.	Amount of Annu. thereunder.
From 1819 to 1859, both inclusive	38,258	£ 13,360,000	26700	£ 693,600
1860	5,268	1,772,000	2638	68,800
1861	5,520	1,868,000	2597	68,000
1862	6,991	2,400,000	3150	82,000
1863	8,338	2,888,000	2484	64,600
1864	12,441	4,276,000	2326	60,800
1865	15,549	5,372,000	2709	71,000
1866	19,826	6,888,000	2803	73,600
1867	15,327	5,816,000	3238	79,800
1868	14,670	7,944,000	3818	99,600
1869	14,124	8,072,000	3629	102,800
1870	10,162	6,056,000	2430	64,000
Totals	166,474	66,312,000	58,522	1,528,600

Of the above life pol., 99,844, insuring £40,316,000, were in force on 31 Dec. this year; and of the annuity contracts 28,210, for £757,360, were in force at the same date. (See 1875.)

A careful study of the preceding T. shows the following results: That the life bus. in the last 11 years had been in the aggregate more than $3\frac{1}{2}$ times greater than that of the preceding 40 years. In the single year 1866 more than half as much life bus. was transacted in France as in the entire 40 years 1819—59. The amount of life bus. of the first 5 years, commencing with 1860, was more than doubled during the next 5 years, ending 1869. Again, the life bus. since 1866 has shown a considerable decline. The annu. bus. shows different results. The transactions of the past 11 years had indeed exceeded that of the preceding 40 years; but on the whole the bus. showed no great tendency to increase—prob. rather the other way. As life ins. extends, it may be supposed the annu. bus. will decline.

The effect of the war was not only felt in regard to its influence upon new life bus., but in many other ways, as is shown in the following para. from the speech of the Man. of the *Générale* at its ann. meeting, 15 July, 1871:

The life ins. branch of our bus. is the one most affected by our country's disasters; and I fear that the bonuses of the current period cannot fail to be considerably below those of the preceding period. On the one hand, we shall have a decrease in our income from our railway shares, and our house property in Paris; and you know that the surplus interest is the principal source of our profits. On the other hand, the profit on our life bus. will prob. be small: for the standstill of more than 9 months caused by the siege of Paris, and the insurrection of 18 March, as well as the epidemic of smallpox which has raged throughout France, will reduce the ordin. profits from mort. I do not mention the claims occasioned by the war, because they are not numerous enough to exercise a sensible influence on our accounts. We could, if so disposed, have disputed some of these claims; but your board thought it was for the best interests of the Co. not to adhere too rigorously to our legal rights; and they have the satisfaction of informing you that all our losses have been settled without any litigation. You have already learned from the circular addressed to you, that, during the insurrection, our cash and securities were placed under safeguard; and that our property in Paris only suffered damage to the extent of £160. The damage to our property in the country, caused by the war, amounts to between £600 and £800.

This is but a very meagre outline of the difficulties which the French life and other ins. offices experienced during the war. The life cos. doing a large annu. bus. knew that many of their clientèle were entirely dependent upon the regularity of remittances which the cos. could make. When the siege of Paris became imminent, the offices sent large sums to trusty agents in provincial towns for the purpose of meeting their annu. contracts; and when the siege became prolonged, additional remittances were made by means of balloons! On one occasion messengers were suddenly sent to examine the vaults of one of the leading life offices (*l'Union*), because the chiefs of the Commune had heard that the ex-Emperor had deposited 46 millions fr. (£1,840,000) with one of the life offices. It was the endowment policies on the Prince Imperial's life which led to the confusion. (See 1854.)

It is chiefly remarkable that the life offices more especially should have recovered from these disasters so rapidly, and with so little permanent damage.

An estimate made at this date (1870) of the sum insured (life) p. head of the pop. of several of the leading countries of the world, furnished the following results: *England*, £15; *U.S.*, £8 2s; *France*, £1 2s. 6d.; *Germany*, £1. [*LIFE INS., STATISTICS OF.*]

A Decree of the Gov. of National Defence dated 21 Oct. 1870, created a mut. ins. asso. among the National Guard of Paris. The directors of the great life offices of France were by the same decree appointed its managers; but out of a pop. estimated at 2 millions, only 37 members were enrolled.

1871.—A new attraction was attempted to be introduced into life ins in France this year, viz. the *Lottery* element. The *Caisse Générale des Familles* proposed the scheme, in a special prosp., from which we proceed to quote. By this project a "whole life" or an "endowment" pol. might become payable early in life through the drawing of a lucky number in an ann. lottery—*Assurances avec chances de paiement anticipé par voie de tirage au sort*. Each pol. was for a uniform amount of 1000 fr., but any number of such pol. might be held by one person. In the case of an endowment assu. (says the prosp.), the principal object of which is to secure a capital sum at a given period for the benefit of the subscriber, the full amount gained at the ann. drawing will be paid. In the case of a whole life pol., the object of the assu. is different—the assured has the interests of others as well as his own in view, and as the co. is desirous to preserve in its integrity the fundamental principle of that class of assu. (*assurance en cas de décès pour la vie entière*), and to reserve the sum assured intact for those for whom it was intended, a part of the 1000 fr. which may be drawn by the assured at the annual drawing—the amount will vary according to the age of the assured—will be applied to the purchase of a new pol. for 1000 fr. payable at death and entirely free from the payment of prems. From a table which appeared in the prosp., the sums payable under the last-mentioned conditions for each 1000 fr. drawn would be at age 30 (age at time of drawing) 641 fr.; 40, 578 fr.; 50, 497 fr.; 60, 400 fr.; 70, 303 fr. Each year a sum equal to 2 p.c. of the single and 10 p.c. of the ann. prems. received up to the 31st Dec. was to be applied to carry out the scheme mentioned. "With profit" rates were charged, but the insured who elected to join this special department of the co. were not to participate in profits. The scheme

created some excitement in the French ins. world. The Committee of Managers (*Comité des Directeurs des Compagnies d'assurances sur la vie*) in various ways showed their disapprobation of the scheme. M. de Courcy, in a pamph. written at the request of the Committee, and extensively circulated, considered the scheme contrary to law, though it was sanctioned by the Gov., objecting that this sanction was accorded in the troubled period of 1871, when the *Conseil d'Etat* was not re-estab., and when a provisional commission, few in number and overburdened with work, fulfilled hastily the functions of the office. The same and other writers have shown how small the chances of drawing a lucky number were, and, therefore, what disappointments were in store for the pol.-holders. The Gov., however, did not interfere, and the co. was doing a large amount of bus. of this particular class. The drawing takes place every May in the presence of the directors, auditors, and 50 of the largest pol.-holders of each class of insurance (whole life, endowment, etc.), who are summoned to attend. Any pol.-holder may be present as a spectator.

At the close of this year (1871), which had been the most disastrous on record for the French life offices, the leading figures stood as follows: total life pol. issued from 1819, 173,256, insuring £69,872,000. Of these there existed in force on 31 Dec. 97,481, insuring £38,920,000. There had been also issued by the life cos. during the same period 59,916 annu. contracts securing annu. amounting to £1,566,520, of which there were now in force 27,782, securing annu. for £740,640.

The new life pol. issued during the year were only 6782, insuring £3,560,000. The claims by death reached the large total of £586,640, as against £385,720 in 1870. The increase of mort. was due to the combined influences of exposure and privation during the war and the sieges; and to the epidemic of smallpox.

1872.—With the commencement of this year there was estab. the *Journal des Actuaires Français*, which is the organ of the Cercle des Actuaires Français. During this year too, this body undertook the formation of classes wherein gratuitous instruction was to be given in actuarial matters.

1873.—The funds of the French life offices were found to be invested as follows at the commencement of this year:

Nature of Investment.	Amount.	Proportion of this Class of Investment to the whole.
Public Funds	£3,371,806	£29'5
House Property	2,907,698	26 1
Railway and other Debentures	2,182,680	19'15
Railway Shares, Shares of Bank of France, etc.	855,224	7'5
Bonds of the State and various towns	400,588	3'5
Agents' balances and premiums to be received	358,656	3'1
Reversions and Life Interests	332,752	2'9
Various accounts owing	270,353	2'35
In hands of Bankers, Brokers, Credit Sos., etc.	185,368	1'6
Loans on pol.	131,093	1'15
Interests and Rents to be received	113,328	1'0
Mortgages	76,068	0'7
Bills unmatured	36,328	0'3
Miscellaneous securities	113,858	0'95
In offices	25,761	0'2
Totals	£ 11,445,595	100 p.c.

The *Générale* had up to the end of this year issued life pol. for a total of £24,970,246; and of this upwards of two-thirds, £18,605,413, had been issued since 1863. The *Nationale* up to this date had issued pol. for £18,324,078, of which the great proportion, viz. £14,262,766, had been issued in the last 10 years.

The ann. prem. from parti. pol. in the *Générale* this year amounted to £470,847. The profits to the insured for this year appear to be £71,027—or about 15 p.c. on the premiums.

M. Charles Monrose wrote some able papers advocating the adoption of *mutual* life ins. in France; and quoting the successful results attained in Gt. Brit. and the U.S.

1875.—The pol. issued by the 12 proprietary life ins. cos. of France this year were 24,240, ins. £10,184,000, against 17,100, insuring £9,484,000, in the previous year. This is a very remarkable progress in regard to the number of the pol. issued. The amount does not show much advance: therefore it is clear that the pol. have been for smaller amounts. The average of the pol. in 1874 was under £555; in 1875 something over £424.

The mort. experienced by the cos. in 1875 was 1'22 p.c. against 1'03 p.c. in 1874. The per-centage of the amount of pol. terminated to the amount insured was 52'8—this in great part arising from the number of endowment pol. constantly maturing.

The following T. (page 303) is given for the purpose of showing in detail the financial position of each of the cos.

FINANCIAL POSITION OF THE LIFE INSURANCE COMPANIES IN FRANCE, IN THE YEAR 1875.

FRANCE.—LIFE INS.															
Estab.	Name of Co.	CAPITAL.			LIFE INSURANCE.					ANNUITIES.		RESERVE FUNDS			
		Nominal Amount.	No. of Shares.	Nominal Value.	Paid per Share.	Market price.	Total amount insured since orig. of Co.	Pol. in force 31 Dec. 1875.	New Ins. of the year.	Total Premium Income.	Death Claims of year.		Percentage to claims.	Annu. paid in the year.	Purchase Monies received in the year.	Amount [Ins. Fund.]
1819	Assurance Générale	£ 120,000	400	£ 300	300	£ 2960	£ 30,520,000	£ 17,094,800	£ 2,508,800	£ 564,000	£ 201,680	35.7	£ 304,360	£ 350,400	£ 5,617,139
1829	L'Union.....	400,000	2,000	Nil	200	128	10,600,000	5,456,800	1,145,600	172,400	82,400	47.8	60,240	43,200	1,263,546
1830	La Nationale.....	600,000	3,000	200	Nil	528	21,640,000	13,126,400	1,758,400	428,000	196,080	45.8	257,640	204,000	4,851,594
1844	Le Phénix.....	160,000	800	200	40	380	10,400,000	6,946,000	1,452,800	300,800	68,840	22.7	26,040	36,000	1,089,157
1850	La Caisse Paternelle.....	240,000	12,000	20	4	7	7,720,000	2,496,000	358,000	68,000	25,080	36.8	29,680	20,000	412,140
1854	Le Crédit Viager.....	200,000	10,000	20	5	5	5,820,000	1,640,000	420,000	46,000	20,000	43.5	58,120	53,200	518,954
1858	La Caisse Général des familles.....	240,000	12,000	20	4	3.10	7,160,000	2,496,800	840,400	88,000	20,600	26.4	51,160	22,800	510,319
1864	Le Monde.....	200,000	10,000	20	4	2.10	3,896,000	1,600,400	346,000	53,600	26,640	23.4	17,000	18,000	368,150
1865	L'Urbaire.....	480,000	12,000	40	{ 40 48 19 }	48	3,960,000	2,251,600	498,800	79,200	20,880	49.7	14,760	12,800	617,737
1866	L'Alliance.....	160,000	4,000	40	8	10	1,152,000	352,200	124,800	11,200	6,160	55.0	4,760	1,200	86,168
1872	Le Soleil.....	480,000	12,000	40	10	28	1,084,000	745,400	418,000	22,800	1,000	4.3	7,640	18,200	221,008
1873	L'Atlas.....	200,000	10,000	20	5	6	692,000	511,200	320,400	18,400	440	4.2	2,640	2,600	117,819
							104,644,000	54,717,600	10,184,000	1,852,400	669,800		834,040	842,400	15,673,731

In the case of *L'Union* and *La Nationale* which have no paid-up cap., the shareholders deposit with the co. in respect of each share held by them, French Rentes sufficient to produce 50 fr. p. a. int. The int. is received by the shareholders, but the Rentes are held as security for the uncalled cap. The investments of the life cos. at the close of this year amounted in the aggregate to £15,673,735—showing an increase of more than 4 millions sig. from the end of 1873. The nature of the investments had undergone a considerable change. Over 40 p.c. of the whole was now in the French Public Funds; while the item "miscellaneous securities" had increased more than four-fold. It is a noticeable feature that while something like 44 p.c. of the whole investments of the Brit. offices are in mortgages, less than one-half p.c. of the funds of the French offices are so invested. But on the other hand nearly 20 p.c. of the funds of the French life offices is invested in house property—which is understood to yield a very excellent return of interest; while the British offices rarely own any house property other than their own chief and branch offices. The French, it is clear, prefer to be owners rather than mortgagees. The English offices have only about 8 p.c. of their funds invested in Gov. securities. In France such investments realize from 4½ to 5 p.c. The tax inflicted this year on the sums payable under life pol. has been spoken of under sub-heading *Fiscal Burdens on Ins.*

The following constitutes a continuation of the T. given under date 1870 :

Date.	Life Ins.		Annuities.	
	No. of Life Pol. issued.	Amount Insured.	No. of Annu. Contracts.	Amount of Annu. thereunder.
1871	6,782	£3,560,000	1394	£37,920
1872	13,140	6,824,000	2091	58,760
1873	13,250	7,480,000	2270	53,760
1874	17,100	9,484,000	3400	86,560
1875	—	11,360,000	—	120,020

It must be added that the preceding figures only apply to the 13 French proprietary life offices (*La Confiance* being added to the 12 offices named in the T. last given); and therefore does not represent the whole life bus. of France. *Le Conservateur Mut.* appears to be still in operation. In add. there is to be taken into account the life bus. of all the foreign cos. The *Gresham* has a very large bus., while the *New York Life* also issues a considerable number of pol. yearly.

1876.—The following is a Table of French Life Ins. Asso.—Proprietary and Mutual :

Date.	Name of Asso.	Location.	Constitution.	Fate.
1788	Royal d'Assurances	Paris	Proprietary	Died out.
1819	Assurances Générales	Paris		Existing.
1820	Royale d'Assurance (now <i>Nationale</i>)	Paris		"
1828	Société de l'Union	Paris	Proprietary	"
1830	La Nationale	Paris	Proprietary	"
1833	Banque Philanthropique		Mutual	
?	Banque Nationale des Familles.		Mutual	Died out.
1841	L'Equitable	Paris	Mutual	
"	La Concorde	Paris		
"	L'Economie	Paris		
"	Caisse Paternelle (Tontine)	Paris	Mutual	Died out.
"	Caisse des Ecoles et des Familles	Paris	Mutual	
?	Assurances Générales Réunies	Paris	Mutual	Died out.
1842	La Minerve (Tontine)		Mutual	Died out.
"	La Concorde	Paris	Mutual	
"	La Prévoyance	Paris	Mutual	
?	Avenir	Paris	Mutual	Died out.
1843	L'Européen	Paris	Mutual	
"	La France	Paris	Proprietary	Died out.
?	Banque Mut. d'Economie et de Prévoyance	Paris	Mutual	Died out.
1844	Le Phénix	Paris	Proprietary	Existing.
"	Le Conservateur	Paris	Mutual	
"	La Providence	Paris	Proprietary	Died out.
?	Philogène	Paris	Mutual	"
?	Caisse Mut. d'Epargne	Paris	Proprietary	"
1845	L'Urbaine	Paris	Proprietary	
?	Providence		Mutual	Died out.
?	Société Civile des Nu-propriétaires	Paris		"
?	Soleil			"
?	Immortelle	Paris	Mutual	"
?	Aigle			"
?	Minerve Française	Paris	Mutual	"
?	Mélusine			"
?	Jeune France	Paris	Mutual	"
1850	La Caisse Paternelle	Paris	Proprietary	Existing.
1854	Le Credit Viager (? formerly Imperial)	Paris	Proprietary	"
1858	Caisse Générales des Familles	Paris	Proprietary	"
1864	Le Monde	Paris	Proprietary	"
"	Alliance des Départements	Havre	Proprietary	
1865	L'Urbaine	Paris	Proprietary	Existing.
1866	L'Alliance	Paris	Proprietary	"
1872	Le Soleil	Paris	Proprietary	"
1873	L'Atlas	Paris	Proprietary	"
1875	La Confiance	Paris	Proprietary	"
"	La Famille	Paris	Proprietary	?
1877	L'Abeille	Paris	Proprietary	Forming.

The preceding T. we believe to be a complete list of the asso. founded or projected in France down to this date, for the ins. of life—omitting therefrom all purely *Annuity* and *Tontine* asso.; also asso. for ins. of *cattle*, which curiously enough have been sometimes classed as among the life ins. asso. in that country!

We regret not being able to trace more minutely the progress and fate of the life ins. asso. of France. We have placed no name in the preceding T. for which we have not had what appeared to be good authority; but to obtain exact details is a matter of the greatest difficulty.

Mr. F. Allan Curtis, Sec. of the *Gresham Life*, read before the Inst. of Act. this year, a paper: *Life Assu. in France* [*Assu. Mag.* vol. xix. p. 414], wherein he commences by a statement, the truth of which the reader must readily admit, viz.:

There is a prevalent but erroneous idea entertained on this side of the Straits of Dover, that the bus. of the French life assu. cos. is mainly composed of annuities and endowments, with but very little of life assu. properly so called. The truth lies much the other way. Indeed, the amount of bus. transacted in the assu. of human life, by the few French cos. that exist—that is to say, for sums payable in the event of death—reaches a yearly aggregate of several millions of pounds stg. The most successful French co., which at the same time is the oldest, issued, in the year 1874, whole life assu. pol. for very nearly two millions stg. in that class of assu. alone, and in France alone—an amount that exceeds anything yet achieved by any English co. whatever, taking, altogether, its bus. from Gt. Brit., the Colonies, and India.

The paper, and the discussion upon it which followed, elicited many points of interest in regard to the practices of the French life offices, of which we have made use in this art.

[The omission from their proper chronological place in this art. of the following lines was an oversight:

1681.—The famous *Ordonnance de la Marine* of this year deals in the following summary manner with life ins. [sec. "Of Insurances," par. 10]: "*We forbid making ins. on the lives of any persons.*" The sec. which follows is confirmatory: "XI. Those, however, who shall redeem captives may insure on them the price of their Ransom, which the insurers shall pay if in their way back they shall be retaken, killed, drowned, or if they die otherwise than by a natural death." See CAPTIVITY, INS. AGAINST.]

Life Ins. Practice.—The practice of Life Ins. in France differs very essentially from that in the U.K. Until a comparatively recent period the great bulk of the bus. transacted by the life offices there was that of granting annu., either immediate, deferred, or survivorship—the latter of the Tontine variety mostly. Now the proportion of life bus. is largely increasing. A good deal of this is of the *endowment* class; but the "whole life" is extending very rapidly.

But it is not in regard to the nature of the bus. that we propose here mainly to speak. It is necessary to notice that the legal constitution of French cos. is different in many respects from that of the Brit. ones; while the "contract" entered into is also widely different.

It seems desirable at this point to endeavour to define the nature of the several contracts of Life Ins. entered into in France. These fall under two categories. 1. *Assurances en cas de décès*—which are in fact whole life (*vie entière*) ins. payable on the death of the life (*la tête*) insured. 2. *Assurances en cas de vie*, whereunder payment is only to be made if the life survives. These are either endowments (*assurances différées*) or annuities. Endowments may indeed fall under the first designation, where they are payable at a certain age, or before the life drops. This variety is designated *assurances mixtes*. Then there is a class of term-certain ins. known as *assurances à terme fixe*, whereunder the sum insured is payable at a fixed date, whether the insured be dead or alive, *while the payment of the prem., however, depends upon his living*. This is a form of ins. not known in England; and it is found convenient in the case of provision for children by their guardians. Then there is another class called *contre-assurances*, whereby the prem. paid either for a deferred annu. or an endowment, shall be returned in the event of the death of the life insured. Such ins. have been granted in Eng.; but in France it appears to be the practice to take out a separate pol. for ins. the return of prems. They are classed as "temporary increasing ins."

It is probable that short-term ins., and other contracts such as are known in practice in Eng., are also issued in France. The "Tontine endowment classes" are conducted on a plan peculiar to themselves.

Claims.—The sums insured under life pol. in France are usually payable *four months* after death, i.e. proof of death; but with some of the cos. "immediate" payment is promised.

Commission.—The commission allowed to agents by the leading French life offices is 40 p.c. on new prems., and 2 p.c. on renewals. Canvassing agents, devoting their whole time to the bus., are paid on a higher scale, viz. 50 p.c. on first prem., 10 p.c. on second, and a final 10 p.c. on the third.

Contract of Ins.—In French life ins. pol. there is an implied contract with the insured that all prems. paid shall be improved at 4 p.c. int.; and in conformity with this somewhat primitive idea an account is opened with each pol.-holder, and he is so credited. Any bal. of interest remaining over is carried to the profit and loss account of the co. The ins. co. and its pol.-holders, instead of constituting one compact body, animated by mutual interests, are in fact two bodies, having very different interests in detail, although

one common interest in the success and solvency of the enterprise as a whole. It is easy to see, when this fact is kept in view, why mut. ins. asso. never have flourished and never can flourish in France. The requirements of the law of France in regard to the obligations imposed upon managers and proprietors of ins. cos. in France have led very much to the state of things which now exists. (*Regulations*, etc.)

The contract then stands thus: a fixed ann. payment by the insured, to accumulate at a fixed ann. rate of int., in view of producing the sum named in the pol. during the average lifetime of the insured. If the rate of int. assumed in the calculation be not realized, the loss falls upon the co. If the investments turn out bad, and involve any loss of the principal, that is a matter affecting the proprietors alone. If the mort. be greater than that provided for by the Mort. T. employed, that again is a matter for the proprietors, and not the pol.-holders. But here the co. has its remedy. It adopts a T. of Mort. which shows a greater ratio of deaths than that which will be experienced with ordinary care in the selection of the lives insured; and by way of compensation to the insured for this, it undertakes to credit the pol.-holder with *one-half* the profits realized by the co. on its life ins. account.

M. de Courcy, an able writer on Ins. in France, defends the practice here stated (in his *Précis de l'Assurance sur la Vie*) as follows:

It is necessary to explain to the assured, with regard to the profits, of which they get one-half, what they consist of, and where they come from. When the assured behold the splendid buildings of the Co.—when they hear the financial operations of the Co. spoken of—the assured fancy that they have something to do with them. Nothing is more erroneous. *The assured are, and ought to be, absolutely strangers to the chances of loss or profit from any financial operations of the Co. . . .* The assured are not shareholders; it is not they who depute the Co. to speculate for them at the "Bourse" or elsewhere, nor to build houses, nor to buy lands for them. They ask for an assurance, a guarantee which is the very reverse of a speculation. They pay to the Co. stated sums, settled by a tariff fully considered, which presupposes that these sums will yield 4 p.c. int., whether they really do or not. On the other hand, the Co. engages, at its own risk and peril, to pay a fixed sum. It is quite just that the Co. should do with the money as they please, and should have all the chances of their operations.

This gives us an insight into the financial management of French life offices. How the accounts are made up in view of determining the "profits" will be spoken of under *Surplus*.

Duelling and other Suicides.—We believe that under the law of France, no ins. co. may issue pol. covering death by suicide or duelling—nor may they pay any claim where the death has resulted from either of these causes. Yet these are, or have been, unfortunately very frequent causes of death. It was a short time since proposed that some English co. should estab. a branch office in Paris for the purpose of ins. against these risks, we assume by way of supplementary pol.

Forfeiture of Pol.—The per-centage of life pol. lapsing from non-payment of prem. is very small in France—smaller perhaps than in any other country. We have given some general details under sub-heading *Life Ins.* Those we have at hand of a more exact nature relate to the period of the late war, and the results for general purposes would consequently be misleading. The tendency of the offices is to make the lapsing of pol. less onerous. Here are the conditions of 2 of the cos., one old and the other more modern. Thus *L'Union*:

In case of non-payment at the time fixed, the ins. is forfeited, without notice being given or further postponement. The forfeiture shall be total, or only in reduction of the amount in accordance with the following article: (a.) The pol. is forfeited, and the prem. paid belong to the co. when the prem. of the first 3 years have not been paid in full. (b.) The ins. will be reduced according to the table printed on the back of the pol., whenever at least the prem. of the first 3 years have been paid in full. The amount insured, thus reduced, will be paid upon the death of the pol.-holder.

While *Le Monde* deals with the question in the following terse manner:

In case of discontinuance of payments, no forfeiture is incurred, provided three ann. prem. have been paid. In such case the amount of ins. will be reduced in proportion to the amount of prem. paid.

See *Surrender Values*.

Insurable Interest.—About 1850 the question of Insurable Interest in regard to life pol. was before the French Courts, and the necessity of an absolute interest was upheld. M. Guinet, Avocat, had pub. a "Memoire" upon the subject about the same date, in which the same view was asserted. In this view the sale of life pol. is held to be of doubtful legality in France. [*LIFE POL., SALE OF.*]

Life Fund.—The practice of determining the proper amount of the life fund of an ins. co. does not appear to be entirely settled in France. There is an interesting paper on the subject by M. Maas in vol. i. of *Journal des Actuaires Français*, p. 97, of which Mr. F. A. Curtis has given a translation in his paper in *Assu. Mag.* vol. xix. p. 414. The subject is again referred to in some detail, under sub-heading *Reserves and Surplus*.

Limit of Ins.—The largest ins. which can be granted on any one life by the *Générales* (the largest life ins. co. in France) is £8000. The largest annu. £4000 p.a. We do not think it likely any other co. exceeds these limits.

Non-forfeiture of Pol.—The practice in France is that when the prem. are discontinued, the contract is not forfeited, but is reduced to the proportion of its benefits represented by the prem. already paid. [*Forfeiture of Pol.*] [*Surrender Values.*]

Non-participating Pol.—The prem. for these is usually 10 p.c. less, i.e. there is an abatement of 10 p.c. of the prem. on pol. of this class.

Participation in Profits.—See *Profits*.

Premiums (Life), 1788.—The first French Life Co., *Royale*, founded this year, charged a scale of prem. of which the following affords an example:

At 30 years, 3'70 p.c.; at 35 years, 4'20 p.c.; at 40 years, 4'80 p.c.; at 45 years, 5'50 p.c.; at 50 years, 6'45 p.c.

This is about 50 p.c. higher than the present rates, and the new co. did not give parti. in the profits. Objection to the high rates had been foreseen, and met in the following terms in a prosp.:

Some persons will perhaps consider that the Co. should have fixed its prem. at a lower rate. But beside this, that they are in general below the English prem. (which was not quite correct), it would have been imprudent to lower them more until experience had thrown more light in France upon this sort of calculation. In the mean while the Co. should not expose itself to loss by too low prem.—*Prosp. of the estab. of Life Assu. in France, Paris, 1788.*

It is not known from what T. (if any) these prem. were deduced.

1818.—The *Compagnie d'Assurances Générales*, founded this year, is known to have had its prem. deduced from *Duvillard's* T., which "appeared most suitable for an estab. destined to operate in France, and which, although more favourable to the public than the *Northampton* T., still left to the assurors a suitable margin, and covered every chance of loss."—M. Maas, *Journ. des Actuaire Français*, vol. i. p. 99.

Nearly all the later life cos. have deduced their rates from the same T. with 4 p.c. int.

The annexed is the rate of prem. deduced from *Duvillard's* T. as used by the French life offices. It has no loading, save some 4 p.c. arising from the mode of calculating it. This leaves them a margin of more than 30 p.c. up to 45 years of age, and of 30 to 20 p.c. up to age 70. After age 70 the margin is insufficient, and at 80 there is left no margin at all. But at these ages ins. in case of death are not often granted. It will be observed on comparison that at age 65 the *Duvillard* tariff is higher than that of the *Experience* No. 2 (loaded 30 p.c.), while at 50 it is less, and becomes so again at 70. The cause of this apparent anomaly is that, from the age of 60, the French cos., as a precaution, increase their prem. 10 p.c.; but even this augmentation is insufficient at the very advanced ages.

The rates of 5 of the leading offices are, or were, precisely the same.

It is the practice to charge a prem. in relation to the exact age, as 30 years and 3 months; 40 years and 9 months, etc. These intermediate prem. appear according to English practice to be inconvenient. The ordinary use of the decimal system of money in France renders the practice really very simple.

Profits.—It is usual for the French life offices to return to their pol.-holders one-half the "profits" realized. The circumstances attending this return have been spoken of under *Contract of Life Ins.* The mode of ascertaining the so-called profits will be spoken of under *Reserves and Surplus*.

The *Union* Life (the second of the existing life offices of France) founded 1829, adopted the plan (admittedly copied from the English) of giving the pol.-holders parti. in profits; and all the later French life offices have adopted it.

The period of distribution is usually each second year.

The amount of profits distributed among the pol.-holders of some of the French life offices, however obtained or ascertained [*Reserves and Surplus*], has been very large; much in excess of anything known on this side of the Channel. See *Ins. Record*, 4 Dec. 1874.

The following examples are taken from the prosp. of the *Générale* under date 1875.

1. Pol. for £800 taken out Sept. 1858 at age 44 years and 3 months; prem. £30 2s. 2d. The insured has paid 16 prem., and has received in cash £114 5s. 10d.—being 23'7 p.c. of the prem. paid.

2. Pol. for £2000 taken out June, 1858, age 51; prem. £96 16s. The insured has paid 16 prem., and £604 7s. 5d. has been added to his pol.—rate £1 17s. 9d. p.c. p.a.

3. Pol. for £1000 taken out Sept. 1850, age 49, prem. £44 16s. The successive bonuses were applied to reduce the prem., which became entirely extinguished in the 23rd year. In add. the insured has received £56 2s. 2d. in cash; and £43 17s. 7d. has been added to the pol.

Reserves and Surplus.—The mode by which the required reserves are calculated, and the existence of a surplus, or otherwise, ascertained, differs very materially in France from the practice in England. We follow the statement made by M. de Bosredon, the Man. of the *Générale*, for the Ed. of the *Assurance Magazine*, and pub. in that Journal (vol. xix. p. 443), viz.:

The method by which we calculate our reserves is extremely simple. We make use of our own rates, and by means of a single prem. which represents the value of the increase of risk since the opening of the pol., we place the contract in the same position as if the ins. were proposed for the first time on the day of valuation. For example, a person of 37 has taken out a whole life pol. for £1000, at an ann. prem. of £30, being at the rate of 3 p.c. At the date of the valuation the life is 40; the ann. prem. at which age is 3'28 p.c. Consequently the prem. of £30 which insured £1000 at age

Age.	Prem.
25	2'21
30	2'49
35	2'84
40	3'28
45	3'87
50	4'66
55	5'71
60	7'13
65	9'96
70	12'84
75	16'70
80	21'31
85	23'46
90	24'70
95	31'77

37, will only insure at present age the sum of £914'63; so in order to make up the sum insured, of £1000, it is necessary to insure the sum of £85'37; and the single prem. at age 40 according to our rates being £46'86 p.c., we place in reserve £40'005. *The method of calculating the reserves is the same in all the large French cos.*

Here then we have a 4 p.c. gross prem. valuation, and no reservation for future expenses. There appears to be an adjustment in regard to the prem. not all falling due at the date of the valuation. This system—which may be described as a somewhat rough and ready one—appears very well adapted to the proprietary life cos. of France, but would not answer to the minute requirements of the valuations of Brit. life offices.

The Profit and Loss Account of the *Générale* for 1872—an unfavourable year in its operations, but the only one we have available—stood as follows :

Cr.—Balance at 31 Dec. 1871	£245
Profit on with-profits ins. (whole life, endowment, and term-certain)	284,108
Profit on without-profit ins. (ditto)	633
Profit on ins. of various kinds	529
Profit on life annu.	4,054
Profit on purchase of reversions	1,499
Balance of interest account	95,138
	<u>£386,206</u>
Dr.—Loss on various classes of ins.	£6656
Loss on purchase of Gov. life annu.	37
Gen. expenses, salaries, brokerage, agency expenses, and advertisements	128,041
Assessment for charitable purposes	1,341
Bonus to the insured (partl. classes)	142,054
Balance	108,077
	<u>£386,206</u>

The “bal. on int. account” above is, we presume, after crediting the pol.-holders with 4 p.c. The “bonus to the insured” is for 2 years. (*Contract of Ins.*)

In the *Journ. des Actuaires Française* (vol. i. p. 97) is a paper by M. Maas: *On the Calculation of the Prem. and the Reserves of Life Assu. Cos. in Eng. and France*, wherein the attempt is made to deal with the entire subject on a more scientific basis than the preceding.

Mr. Adler is of opinion that, “notwithstanding the very unscientific method pursued in France, the cos. seem to make a sufficient reserve.”—*Assu. Mag.* vol. xix. p. 428.

Succession Duty.—It had been the custom in France to exempt pol. of life ins. from this duty, on the ground that the benefit of the pol. had never vested in the estate of the insured; but passed directly, *i.e. omisso medio*, from the ins. co. to the person entitled to the benefit under the pol. In 1869 the Stamp Officers determined to try the question in regard to a pol. for 20,000 fr. insured by M. Krieg for the benefit of his legal representatives, and made payable 4 months after his death. The case, *L'Enregistrement v. Krieg*, came before the Tribunal of Saverne, and there the judgment was in favour of the deft.; but on appeal to the *Court of Cassation*, that judgment was reversed; and it is now held as settled, by the Law of France, that the proceeds of life pol. are subject to Succession Duty.

This is in add. to the tax of 1 p.c. on the sum insured, payable on all life claims, under the law of 1875. [*Fiscal Burdens on Ins.*]

Suicide.—See *Duelling*, etc.

Surrender Values.—Between 1845-50, prob. earlier, the *French* life offices adopted the plan of granting surrender values in the shape of “free pol.” Here is the scale adopted by *L'Union*.

T. of Reduced Assu. granted in respect of each 100 fr. insured on lapse of pol., according to the number of years it had been in force.

Age at date of pol.	After 5 Years.	After 10 years.	After 15 years.	After 20 years.	After 25 years.	After 30 years.
30	12'16	24'05	35'60	46'49	56'38	65'08
40	15'21	29'54	42'57	54'02	63'78	71'91
50	18'49	34'74	48'61	60'13	69'35	75'97
60	21'25	38'91	53'04	63'18	—	—

Liquidation of Ins. Cos.—The liquidation of ins. and other joint-stock cos. in France involves none of the delay, expense, or injustice associated with such liq. in the U.K. The law lends its aid to heal up misfortune; not to destroy and render desolate.

Live Stock Ins.—See *Cattle Ins.*

Marine Ins. (Hist. and Statistics).—The hist. of Marine Ins. in France hardly admits of being traced in one clear line of descent; and for this very obvious reason—that the different provinces, which now go to make up France as a whole, were for several centuries during the later “Middle Ages” themselves disconnected, and had very varying commercial relationships. We do not propose to attempt to connect all the links of this somewhat lengthy chain at this point. We must be content with the main facts. The details will become developed by reference to titles: GUIDON DE LA MER; MARSEILLES; OLERON, ROLES D’; ROUEN, etc.

1500.—From the *Guidon* it appears that, at its date, the practice of marine ins. was general in France, Spain, Italy, Flanders, and England; and although at this period no Ordin. or Edict had in France estab. any regulations for this branch of bus., it appears from *Dumoulin de Usuris*, and from the Edict of Charles IX. of 1556 establishing the consular jurisdiction at Rouen, that ins. was in use in the west and north of France in the earlier part of the 16th century. Nay it is prob. that, from the intro. of this kind of bus. at Rouen, some time before 1556, the *Guidon de la Mer* was there composed, to serve as a manual for the consular jurisdiction estab. by the Edict of that year. And, from the vicinity and intercourse with Barcelona, it is also prob. ins. was practised at a still earlier period at Marseilles, and the other cities of the South of France.—Reddie’s *Historical View of the Law of Maritime Commerce*, 1842, pp. 342-3.

1600.—Under sub-heading *Ins. Literature* we have indicated some of the works bearing upon marine ins. during the preceding, as also during the century now commencing. The following summary from Reddie (than whom there is no higher authority) will be useful to complete this portion of our review:

Besides the anonymous author of the *Guidon de la Mer*, a few other writers in the earlier part of the 17th century contributed their aid in France towards the elucidation of the law of maritime commerce. About the beginning of the century, Mornac wrote a commentary on the title of the Roman Digest, ad Legem Rhodiam. In 1656 and 1663 Giballinus, a Jesuit of Lyons, pub. in 2 vols. fo. a work entitled: *De Universa Negotiatione*, which contains a treatise *De Usurio et Commercialibus*. In 1661, Cleirac, who was an advocate in the Court of Admiralty at Bordeaux, pub. his collection entitled, *Us et Coutumes de la Mer*. This compilation consists of three parts. The first contains the *Roles d’Oleron*, which had been previously edited by Garcie, with a commentary by Cleirac; the *Laws of Wisby*; and the *Laws of the Hanse Towns*. . . . The third part is a compilation of the ancient French Ordin. of the French Kings which relate to the marine. . . .

From the preceding detail we perceive what was the state of the maritime and commercial law of France at the commencement and during the early part of the 17th century. There were no general maritime statutes or legislative acts except the Ordonnance of 1400, the Edicts of 1549 and 1584, and the Ordonnance of 1619; of which the regulations related more to the police of navigation and to maritime captures than to maritime contracts and transactions; but which so far as concerned jurisdiction and superintendence on the part of Gov. were less imperfect than in the other branches of maritime law just alluded to.

The most important part of the maritime law of France, that which regulated contracts and directed the adjudication of contested cases, consisted solely of the traditional Roman law, and of local statutes and usages, such as those of Marseilles, Montpellier, and Narbonne in the south, extended and improved by the adoption of the Consolato del Mare; and in the western and northern provinces, likewise of local usages, particularly the *Roles d’Oleron*, and the principles of the Roman law, traditional, or as derived from the compilations of Justinian, as in a manner forming the common law of the kingdom in the matter of contracts. But, in the lapse of time, many of these local statutes and usages had ceased to be sufficient or even applicable; and the extension of navigation and commerce, and the introduction of new arrangements and species of bus., required new and add. regulations, founded upon more enlarged experience. (p. 345.)

1668.—The facts which are given in the five following para. we draw from the *Dictionnaire du Citoyen*:

Policies and contracts of assu., or *Bottomry*, had been many years used in France, and long experience had sufficiently proved how useful they were to trade and navigation: yet before 1668 the bus. of insuring was not carried on but in the maritime towns of France; and it was then judged most advantageous to settle it in the capital. There were indeed before that time some meetings of assemblies of ins.: but as they were held only by private persons, and were not authorized by the King’s Letters Patent, they had but little credit, and their pol. were neither many, nor for considerable sums.

It was therefore by a decree of the Council of State, dated 5 June, 1668, that Louis XIV., then reigning, granted leave to the merchants, traders, insurers and insured, and other persons of the city of Paris, properly qualified, who for some time past had begun to meet for the purpose of transacting the bus. of ins. and bottomry, to continue their meetings and even to set up an office which was to be styled the *Office of Ins.*; over the door of which should be put the following inscription: “The Chamber or Office of Insurances and Bottomries, estab. by the King;” and on the 16th of the same month the Lieutenant-General of the Police ordered, by a sentence, that the said decree of the Council should be registered in the rolls of that Court.

1671.—This Chamber was not brought at once to a degree of perfection; but on 4 Dec. 1671, the partners or associates, to the number of above sixty, of the richest merchants, bankers, traders, and citizens of Paris, who had a great credit in trade, made in their general assembly, a regulation containing 23 articles for the government or administration of the Chamber of Ins. Other articles were afterwards added, and other decrees followed.

1672-3.—There was another decree of 13 Sept. 1672; and another of 26 Aug. 1673, which forbids the insurers and insured to carry the disputes arising among them,

on account of pol. of ins. and bottomry, before the ordinary Courts of Justice; but obliges them to choose arbitrators among those who compose the Chamber to be their judges.

1675.—There was another edict of 11 Jan. 1675, relating to the insurances made on a "friend's account," and for finding out when required the true names of the persons for whom anything was insured. The reason for which last will appear hereafter.

1681.—We next reach a most important period in the history of Marine Ins. in France. Louis XIV. was now on the throne. The ambition of that monarch, and the eminent talents of his minister Colbert, effected a wonderful change in various departments of the Gov. After having created a navy and raised it to a state of splendour corresponding to the extent of his power; after having formed various estab. for the protection and encouragement of the national commerce and manufactures, and of the navigation and maritime commerce of his subjects; it only remained for Louis to confirm and regulate that internal and maritime commerce by a system of laws adapted to the circumstances of the times. There resulted first the *Ordonnance du Commerce*, in 1673—a work of great importance, treating as it did of the usages and customs of commerce, including bills of exchange and bankruptcy; and next, this year, the *Ordon. de la Marine*.

The *Ordonnance de la Marine* surpassed in excellence the *Ordon. du Commerce*. It has been well said, that it was reserved for the genius of Colbert to perceive the advantage of collecting and arranging all the materials of maritime law, and of forming out of them a code which might complete the laws already in existence; and, at the same time, reconcile and digest the variety of ancient usages into one consistent and uniform body of positive legis. Pardessus tells us with what admiration, and almost enthusiasm, this new maritime Ordon. was received in Europe "even by the States the most jealous of the glory with which Louis XIV. was then surrounded." We shall have occasion to say more upon this subject hereafter; but we now have to look to the Ordon. itself, or rather to that portion of it which falls within our immediate purpose.

Under the division "Of Insurances" there are the following regulations:

1. To all our subjects, and even to foreigners, we allow to insure, and have ins. made, in our dominions, on ships, goods, and other effects that may be carried by sea, or navigable rivers. And to the insurers to stipulate and fix a price for the consideration whereof they take on themselves the risk.

2. The contract, called the pol. of ins., shall be drawn up in writing, and may be executed as a private deed [? without notarial verification].

3. The pol. shall contain the name and place of residence of the person who has the ins. made; whether he be the proprietor of what he insures, or acts as factor [broker]; the effects whereon the ins. shall be made; the name of the vessel, and the master; the place where the goods shall have been, or shall be laden; the port whence the ship shall depart or is departed, where she may load and unload, and where she shall touch at; when the risk shall begin, when end; the sum insured; the prem. or cost of the ins.; a declaration that the insurer and insured agree to submit to arbitration any difference that may arise; and generally all other clauses and conditions which they may have agreed to insert.

4. Nevertheless ins. may be made without declaration in the name of the master, or the vessel, or cargo, which may come into Europe from Turkey, the coasts of Africa, or other parts of the world, provided that the name of the person to whom they may be consigned be declared in the pol.

5. If the pol. do not fix the time when the risk shall begin and when end, it shall be as set forth in the xiii. art. of the chap. relating to Bottomree Contracts. [See BOTTOMRY, this date.]

6. The prem. or cost of the ins. shall be paid in full upon underwriting the pol.; but if ins. be made on goods out, and home, and that the ship being arrived at the outward bound port do not return, the insurer shall repay one-third of the prem., except it be otherwise covenanted.

7. Ins. may be made on the hull and keel of a ship, empty or laden, before or on the voyage, on victualling and on goods, jointly or separately laden on a ship of defence, or not so; alone or in company with other vessels [CONVOYS]; out or home; for a whole voyage or for a limited time.

8. If insurance be made on the hull and keel of a ship, her tackle, apparel, fitting and victualling, or on a part thereof, the valuation shall be made in the pol. The insurer nevertheless in case of fraud may insist on a new valuation.

Then follow clauses which have to be given under other heads. Sec. 9 permits seamen, passengers, and others to ins. against slavery. [CAPTIVITY, INS. AGAINST.] [SLAVERY, INS. AGAINST.] Sec. 10 forbids "making ins. on the lives of any person." [See sub-heading *Life Ins.* in this art.] Secs. 12-14 relate to slavery ins. Sec. 15 forbids making ins. on freight [FREIGHT]; 16 against borrowers on bottomry having ins.; 17 against lenders on bottomry insuring any profit on sums lent. It then proceeds:

18. The insured shall always run ONE-TENTH part risk of the value of the effects laden, except in the pol. it be expressly declared that the whole is to be insured.

19. If the insured be on board the ship, or they that be the owners of her, though they do declare that they insure the whole, yet shall they be obliged to run one-tenth part of the risk.

Sections 20 to 22 relate to re-insurance, which is permitted; but is dealt with in a most judicious manner.

23. If nevertheless a pol. be made without a fraudulent intention, wherein the valuation of the effects exceed their real worth, that pol. shall be valid to the amount of their intrinsic value; and in case of loss the insurers shall be answerable for the same, each in proportion to the sums by them underwritten; as also to return the prem. of the surplus value, retaining half p.c.

24. Moreover, if there should be several pol. made without a fraudulent intention, and the first pol. amount to the value of the effects laden, it shall alone hold good. The other insurers shall withdraw their ins., and return the prem., keeping half p.c.

25. In case the first pol. shall not contain the amount of the effects laden, the insurers on the second shall be answerable for the surplus. If there be effects laden to the amount of all the ins. made, then, in case of a loss of a part, it shall be paid by all the insurers, so much p.c. on what they have underwritten.

26. Insurers shall be answerable for all losses or damages which shall happen at sea, by tempest

shipwreck, stranding, running foul of other ships, changing the course, or the voyage, or the ship; jetison, fire, capture, plundering, detention of princes, declaration of war, reprisals, and generally all other accidents of the sea.

27. However if the change of the course, the voyage, or the ship proceed from an order of the insured without the consent of the insurers, they shall not be answerable for the risks. Moreover this shall likewise hold good in regard to all other losses or damage which may happen by the act or fault of the insured; *nor shall the insurers be obliged to return the prem. if they have begun to run any risk.*

28. Nor shall the insurers be answerable for the loss or damage that may happen to the ship or goods through the fault of the master, or mariners, if by the pol. they be not liable to the barratry of the master.

29. The loss, diminution, or waste, that may happen from the perishable quality of anything, shall not fall on the insurers.

30. Nor shall they be answerable for pilotages, warpings in, custom-house dues, reports, anchorages, or any other dues or impositions, on ship or goods.

31. In the pol. shall be specified those goods that are subject to leakage; without which the insurers shall not be answerable for the damage that may happen to them by storm; except the ins. be upon returns from foreign countries.

32. If an ins. be made and particularized to be on several ships, and the whole of what was to be laden be put in one ship, *the insurer shall not be answerable for more than he may have underwritten on the particular ship*, though all the other should happen to be lost; and he shall return the prem. of the overplus, reserving half p.c.

33. When masters of vessels have orders to touch at different ports, the insurers shall not be liable to accidents that may happen to goods on shore, though they were destined for the cargo of the ship on which they underwrote, and she was in port to take them in, except there be a particular agreement in the pol.

34. If ins. be made for a fixed time without declaring the voyage, the insurer, when that term is elapsed, is free from his obligation, and the insured may get a new ins. done.

35. But if the voyage be declared in the pol., the insurer shall run the whole risk of the voyage, provided that there be an augmentation of prem., in case the voyage be longer than the time limited. In case the voyage be less, the insurers shall not return any prem.

36. Insurers shall be exempted from the risk, yet shall get the prem. if the insured, without their consent, send a ship to a port at a greater distance than what is mentioned in the pol., though it be in the same course; but an ins. shall fully hold good, if the voyage be only shortened.

37. If by the insured the voyage be broken before the departure of the ship, the ins. shall be made void, and the insurers return the prem. less half p.c.

38. We declare void the ins. that may be made after the loss, or the arrival, of things insured, provided the insured knew or could know the loss, or the insurers the arrival, before the underwriting of the pol.

39. It shall be presumed that the insured knew of the loss, and the insurer of the arrival, if the news thereof *could have been brought from the place of the loss, or of the arrival, since it happened; reckoning at the rate of a league and a half in an hour, exclusive of other proofs that may be alleged.*

40. If however the ins. be made upon *good or bad news*, it shall subsist, except it shall be proved, exclusive of the allotted time of a league and a half in an hour, as above, that the insured knew the loss, and the insurer the arrival, of the vessel before the underwriting of the pol.

41. The insured, if it be proved against him, shall repay to the insurer what he may have received, and double prem., and if proof be made against the insurer, he shall repay the prem. and twice that sum to the insured.

42. When the insured shall receive advice of the loss of a ship or of goods insured, of the detention by princes, and of any other accidents for which the insurers are answerable, he shall forthwith signify and make known the same to them, protesting that he shall make a cession or abandon to them at the proper time.

43. The insured may, instead of such protestation, at once make his cession or abandon, and summon the insurers to pay the sum insured, as stipulated by the pol.

44. If the term for payment be not fixed by the pol., the insurer shall be obliged to pay the ins. in 3 months after intimation to abandon.

45. In case of shipwreck or stranding, the insured may endeavour, and work at the saving of the goods, without prejudicing himself as to any cession or abandonment which he may afterwards make. He shall also be repaid his charges, the account of which shall be credited on his oath, to the amount of the value of what may be saved.

46. No cession or abandonment shall be made except in case of capture, shipwreck, stranding, detention by princes, or the entire loss of the goods insured. All other damages shall be reputed to be average, which shall be settled between the insurers and the insured, according to their several concerns.

47. No cession or abandonment shall be made of a part of any concern or interest, and the remainder kept; nor shall there be a demand for average except it exceed 1 p.c.

48. All cessions or abandons, as well as all demands in virtue of the pol., shall be made as follows—
1. In 6 weeks for losses happening on the coast of the country where the ins. was made. 2. In 3 months in other provinces of our kingdom. 3. In 4 months on the coast of *Holland, Flanders, and England*. 4. In a year in *Spain, Italy, Portugal, Barbary, Muscovy, Norway*. 5. In 2 years for the coasts of *America, the Brasils, Guinea*, and other distant countries. When these terms shall be elapsed, the insured's demands shall afterwards not be admitted.

49. On the *detention by princes*, the cession or abandonment shall not be made before 6 months, if it happen in *Europe or Barbary*. If in a more distant country, in a year; both to commence from the day of notifying this detention to the insurers. The non-admittance of the insured's demands in the preceding art. shall only after these terms elapse take place.

50. Nevertheless, if goods detained be of a *perishable nature*, the cession or abandonment may be made after 6 weeks, if they be stopped in *Europe or Barbary*; and after 3 months if in a more distant country, from the day of the notification of such detention to the insurers.

51. The insured shall be obliged during the terms mentioned in the two preceding art. to use their utmost diligence for the clearing or taking off the detention. And even the insurers themselves may do so if they think fit.

52. If a ship be stopped by our orders in any of the ports of our kingdom before the voyage be begun, the insured shall not on account of this detention abandon or cede their effects to the insurers.

53. The insured shall be obliged, when he makes his cession or abandonment, to *declare all the insurances he may have made, and what money he may have taken on bottomry, on the effects he has insured*; under a penalty of invalidating his insurances.

54. If the insured shall secrete either ins. or bottomry contracts, and that those, together with what he may have declared, do exceed the value of the effects insured, the ins. shall be void, and the insured obliged to pay the sum borrowed, though the ship be taken or lost.

55. Moreover, if he sues for the payment of the sum insured, above the value of his effects or interest, he shall be exemplarily punished.

56. Insurers on a cargo shall be obliged to pay the sums by them underwritten, only to the amount of what the insured shall prove the shipping and the loss of.

57. The proofs of the shipping and loss of the effects insured shall, immediately after the notification of the cession or abandonment, be communicated to the insurers; who, before such notification, shall not be liable to be sued for the payment of the sums insured.

58. Nevertheless if the insured receive no news of his ship, he may at the expiration of a year for common voyages, reckoning from the day of departure, and after 2 years for those of a greater distance, make his cession or abandonment to the insurers, and demand payment, without being obliged to produce any certificate of the loss.

59. Voyages from France to Muscovy, Greenland, Canada, Newfoundland, its islands and banks, and other coasts and islands of America, to Cape Verd, and the coast of Guinea, and all others which may be made beyond the tropic, shall be reputed long voyages.

60. After the cession or abandonment is made, the effects insured shall belong to the insurer, who shall not under the pretext of waiting for the return of the ship put off the payment of the sum insured.

61. The insurer shall be allowed to produce proofs against any documents the insured may give; nevertheless he shall, in the mean time, pay the sum by him underwrote, upon the insured giving security.

62. The master, who may have ins. made on goods laden in his vessel, shall in case of loss be obliged to prove the buying of them, and produce a bill of lading, signed by the purser or mate.

63. All seafaring men who bring goods from abroad to France, and there have ins. made, shall be obliged to leave a bill of lading in the hands of the Consul, or his Chancellor if any, where the goods are laden; if no Consul, then in the hands of a reputable French merchant.

64. The value of goods shall be proved either by book or invoice; if not, they shall be estimated according to the price which was current at the place when and where shipped, including all customs and charges, till on board, except in the pol. a valuation of them be made.

65. If the ins. be made upon return from a country where trade is carried on by barter, the valuation of those returns shall be made on the cost of those given in barter, adding thereto all charges.

The following two sections relate to payment of ransom in case of captivity ins. Then follow some important prohibitions.

68. We prohibit all police [policy] clerks, sec. of ins. chambers, notaries or brokers, to have pol. underwrote in which anything is left in blank, under the penalty of costs or damages: nor shall they be concerned in insurances directly or indirectly themselves, or by other persons, or take any cession of the rights and interests of the insured, under the penalty of 500 livres for the first time, and in case of recidivation, to be deprived of their employment: which penalties shall not be in any manner moderated.

69. We enjoin under the above penalty that they keep a proper regis., marked on every leaf by the Lieut. of the Admiralty, wherein they shall keep an account of the pol. they shall draw up.

70. If in the pol. there be a declaration that any dispute shall be left to arbitration, and one of the parties demand arbitration before any litigation be begun, the other party shall be obliged to agree to it; and refusing to name them, the judge shall do so.

71. In 8 days after the arbitrators are named, the parties shall produce this document; and in 8 days after that shall sentence be given.

72. Such awards by arbitration shall be regis. or ratified in the Court of Admiralty where they were made. We prohibit the judge thereof, under any pretence whatever, to take cognizance of the merits of the cause, under pain of nullity, and the penalty of damages and costs.

73. Any appeal from an award by arbitration after the regis. thereof shall be to our Parliaments, where, until the amount of the sentence be paid, it shall not be received.

74. If security be given to the judge who regis. the sentence of arbitration, the same shall be executed notwithstanding the appeal.

The Ordin. then goes on to lay down regulations regarding averages which we have already cited under title AVERAGE; see also GENERAL AVERAGE; also as to Jettison and Contribution. [JETTISON.]

We propose, before we advance further, to notice a few of the criticisms (mostly eulogiums) which have been passed upon this Ordon. alike by foreign and English writers.

Valin, in his famous *Commentary* upon this Ordon. pub. in 1760, says: "Universal admiration was excited by the appearance of an Ordon. so beautiful in its economical distribution, so wise in its general and particular policy; so correct and exact in its divisions; and so learned that it presents as many abridged treatises of jurisprudence as there are subjects which it embraces." He designates it a "chef-d'œuvre in legislation."

Abbott (Lord Tenterden), in the preface to his *Laws of Shipping*, pub. 1802, said: "If the reader should be offended at the frequent references to this Ordin., I must request him to recollect that those references are made to the maritime code of a great commercial nation, which has attributed much of its national prosperity to that code; a code composed in the reign of a politic prince; under the auspices of a wise and enlightened minister; by laborious and learned persons, who selected the most valuable principles of all the maritime laws then existing; and which in matter, method, and style, is one of the most finished acts of legislation that ever was promulgated."

Marshall, in his *Treatise on Marine Ins.*, 1802, after reviewing the various Maritime Laws and Ordin. of Europe, says in his "Preliminary Discourse": "But the completest and most comprehensive system of maritime law is the famous Ordin. of the Marine of Louis XIV., pub. in 1681. This excellent code was compiled and arranged by a very masterly hand, under the inspection of Colbert. . . . It forms a system of all which experience and the wisdom of ages had pronounced to be most just and convenient in the marine institutions of the maritime states of Europe. And though it contains many new regulations, suggested by motives of national interest, yet it has hitherto been esteemed a code of great authority upon all questions of maritime jurisprudence." Curious to say, the name of the "masterly hand" who did the real work of compiling this Ordin. cannot be discovered.

This Ordin. has an interest in regard to marine ins. in Gt. Brit., which is more than historical. The great Lord Mansfield, whose able judgments on marine ins. and maritime contracts, during the last century, gave shape and consistency to our own maritime law, took infinite pains to obtain the best information, and to possess himself of the most sound principles applying to the cases which came before him. It is well known that he drew much of his information from this Ordin. and from the elaborate and useful commentary of Valin thereon. So that, by means of our text-books (based as these necessarily are upon the decisions of our courts), we bring into our daily practice the teachings of this Ordin., except only on one or two points wherein there is a marked distinction between the practice of the two countries. Throughout the present work this Ordin. is very constantly referred to.

1683.—The mere promulgation of the Ordin. of Marine did not in itself do much, or indeed anything to promote the growth of Marine Ins. in Paris. So also the Chamber of Ins.; it was merely ministerial in its functions; it did not itself enter into contracts of marine ins. Its functions were indeed much like those of other chambers of ins. in Europe. [CHAMBERS OF INS.] The attention of the Gov. was now beginning to be directed to the development of the bus. of marine ins. in Paris. The contracts regis. in the Chamber at this date were very few.

1686.—An Edict du Roi was given in May of this year, and duly regis. in Parl. By it was erected and regulated a general asso. for [marine] insurances and bottomry in the city of Paris. The Edict contained 29 art., the chief of which we proceed to notice. The 2nd settled the number of members or associates at 30. The 4th ordered the asso. to have a stock of 300,000 livres, divided into 75 shares of 4000 livres each, and fixed the time for the continuance of the asso. at 10 years. The 10th required that the pol. of ins. should contain a clause by which the parties concerned should submit themselves to arbitration in case of dispute. The 14th regulates the appeals from the sentences of the arbitrators, and orders that they should be finally determined by a Councillor of State, the Lieut.-Gen. of Police, and the Provost of the Merchants. The 18th declared that *those who should enter into the partnership and commerce of ins. should not be degraded from their nobility!* The 22nd estab. and settled the fees of the Registrar. The 25th *forbids all persons but such as are members of the asso. to carry on any commerce of ins. and bottomry in the city of Paris.* The 27th left the merchants, traders, and others of the cities of *Rouen, Nantz, St. Malo, Rochelle, Bordeaux, Bayonne, Marseilles, etc.*, at liberty to continue the bus. of insuring; but only upon the same footing as it was before the date of the Edict. The asso. might make by-laws for its own regulation in conformity with the preceding.

Here was a distinct monopoly created. There were to be but 30 underwriters of marine risks in Paris; and all new entrants would have to purchase the right of some existing member. *The monopoly thus created exists to the present day*, so far as individual underwriters are concerned. It is a limited Lloyds, consisting of 30 members!

1747.—We do not know precisely what progress marine ins. had made in France during the half century preceding this date. It seems clear however that the precautions of the Gov. in view of preventing fraud in the bus. had not been crowned with success. Here is an account of certain events of this period, as stated by Cunningham in his *Treatise on Ins.*, etc., first pub. in 1759:

Several merchants in *France*, particularly at *Bordeaux* and *Bayonne*, after the commencement of the late French war, fitted out a great number of ships under pretence and appearance of sending them to the *French* settlements in *America*, etc., and got them insured to their full value at *Marseilles*, and other places in that country; and as the laws of *France* prohibit every person from making larger ins. than what their interest is, they, without discovering what they had done in their country, requested several gentlemen here [*London*] to get ins. made for them *often to three or four times more than their real interest was*: and the said ships being generally taken or lost, the underwriters, without suspecting any fraud, paid their subscriptions, by which means the *French* concerned in these practices got more than they could have done by any fair adventure.

These sorts of transactions became at last so notorious in *France*, that Mons. the Count de Maurepas, Director of the Marine in that country, about May, 1747, took notice of it, and sent a letter to a merchant at *Nantz*, desiring him to inquire of his correspondent in *England* into the valuations of the several ships and cargoes mentioned in the letter, . . . with the amount of ins. made thereon; declaring in the said letter that there were great frauds committed by persons of *Bayonne* and *Bordeaux*, in fitting out ships, and making large ins. thereon, and putting these ships in the way of being taken by the *English*. This gentleman sent a copy of the above-mentioned letter to Mr. Henry Loubier, a merchant of this city [*London*], who generously communicated the same to several of the principal underwriters, and they, in consequence of this advice, chose a few gentlemen from among themselves, as a committee to inquire into these frauds. And they found that several gentlemen in *England* had procured ins. to be made on *French* ships from *Bordeaux* and *Bayonne*, to the *West Indies*, either upon the terms of "interest or no interest," or "without further proof of interest than the pol.," to the

amount of £100,000, of which near the half was disputable losses, by there being great reason to believe that these ins. were fraudulent. (pp. 216-17.)

Several cases arising out of these transactions were before the *English Courts* at this date. We take one as a type. The plt. caused ins. to be made for himself or others, "lost or not lost," on the good ship *L'Heureux*, Capt. Beatrix, from *Bayonne* to *Martinico* and *Cape Francois* in *St. Domingo*, with liberty to touch and stay at any ports or places whatsoever, without prejudice to the insurers [insured?] and without other proof of interest, in case of loss, than the present pol.; and the *French* and *American* livres to be valued at 11*d.* each, without further account to be given; and for this the insured paid 30 guineas p.c., to have 12 guineas p.c. returned, in case the ship should depart with convoy from *Bayonne* or *L'Isle d'Aix*.

The facts regarding this ship had been included in the Rep. of the Committee, sent by way of reply to M. Maurepas's letter, authenticated by a notary public; whereby it appeared that the ship and cargo in dispute were sold in England [after capture and condemnation] for £788 11*s.* 3*d.*, viz. the ship for £400 and the cargo for the bal. And there was insured on her in *England* £2790, and at *Marseilles* it was found upon inquiry that 12,000 livres had been insured, which, at 11*d.* English, amounted to £550. Although these facts were notorious, yet as they did not admit of technical proof, in consequence we presume of some witnesses being out of the jurisdiction of the Court, the plt. recovered the sums insured in England; as also on three other ships insured under like circumstances. — *Pouchon v. Da Costa*, *Lex Mercat. Red.* 271.

1760.—Beawes, in his *Lex Mercatoria Rediviva*, pub. at this date, says:

Pol. of ins. in *France* are generally drawn up in the registry office of ins., in those places where one is estab.; and in those places where there are none, the pol. may be made either before a notary public, or under a private firm. In foreign places where French Consuls are settled, the pol. of ins. may be entered in the Chancery of the Consulate, before 2 witnesses. He adds:

Besides the ins. we have hitherto mentioned [of the ordinary character], others are made in French called secret or anonymous ones, which are performed by correspondence with foreigners, even in time of war. It is inserted in the pol. of this sort of ins., that it is for a friend's account whosoever he may be [FOR WHOM IT MAY CONCERN], without naming the person; and in case the ship or merchandizes so insured happens to be lost, the assured must notify it, and his abandoning the ins., by an act in form, either by the registrar, a notary, or bailiff, demanding payment of the sums insured, in consequence of his relinquishing, in the time agreed by the pol.

It is recorded that this year a new Chamber of Commerce was founded in Paris, which the King permitted to take the title of *Royal Chamber of Assurances*. We have no details regarding this incident.

1761.—The first Société for carrying on the bus. of Marine Ins., as distinguished from the underwriters forming the Chamber of Ins., was formed this year by the Sieurs Emanuel Weis and Co. This was regis. at the Admiralty 23 Oct. Whether it was a Société en Communité or a Société Anonyme, does not appear.

1767.—We have already seen in another division of this art. how Life Ins. met with a very determined opposition in *France*. But Marine Ins. too did not escape condemnation. In a pamph. pub. anonymously (but attributed to the Chevalier Ange Goudard), *Les Intérêts de la France mal entendus*, which attracted considerable attention, and which was lauded for its patriotic views, the author observes: *Quoi qu'il en soit, je dirai hardiment que les assurances chez nous ont mis des entraves aux progrès de notre commerce, et que si notre administration n'y remédie, elles sont à la veille de causer son entière ruine*—which may be rendered: "However this may be, I will say without reserve that assurances with us have put shackles on the progress of our commerce, and that if our government does not apply a remedy, they are in a very fair way to cause its entire ruin." He goes on to argue that the world had done without assurances for 6000 years [which is not true], and might therefore just as well dispense with them in his time.—*Vide F. Hendriks in Assu. Mag.* vol. ii. p. 230. He quotes from ed. of this year.

1760.—M. Valin pub. his most famous work: *Nouveau Commentaire sur l'Ordonnance de la Marine du mois d'Aout 1681*, wherein the author illustrates the text of the Ordon. with judicious observations and learned information, derived from almost every source, ancient and modern, native or foreign. In the preface he says:

It is now essentially necessary not merely to be acquainted with the Ordon. de la Marine, but also to have a thorough knowledge of the Ordon., Edicts, Declarations, Arrêts du Conseil, and Reglemens, which have intervened since the date of that Ordon. And as the anterior almost always serve to make the later regulations better understood, I have paid particular attention to this matter.

Again:

That very fertility in principles which constitutes the excellence of the Ordon. increases the difficulties of a commentary, of which the object is to give everywhere the reason of the law; and to indicate as far as possible, without affectation, however, and without prolixity, the consequences which ought naturally to result from it. For that purpose it is necessary to comprehend thoroughly the sense and spirit of the law, and especially to seize correctly the principles of each subject, in order to guide oneself from consequences to consequences, by means of this assistant thread; and such is the labyrinth of difficulties, which I did not foresee until it was too late. It is perhaps because

others have perceived them sooner, that we have hitherto been deprived of a commentary which has now become too necessary not to be eagerly desired.

Valin said there were in *Paris*, and several other places in France, secret partnerships for assurance, called *Sociétés Anonymes*. The "secret" prob. was used in the sense of being different from the public Chambers of Ins.

1770.—"A Chamber of Ins. was estab. in *Paris*, with a fund of 12 millions of livres, in which some alterations were made about ten months after; but as the art. in the pol. differ very little from the *Dutch*, to avoid repetitions, I shall not enlarge on them."—*Beaumes*, 2nd ed. p. 368.

About this date (perhaps earlier), the principal maritime towns of *France* had asso. for marine ins.; but as regards their particular constitution we have no details. The *Dict. du Citoyen* says: "*Rouen* hath 7; *Nantz* 3; the extent of their capitals and the moderation of their premis. indicate the progress of the nation in commerce."

1772-4.—M. Pothier pub. in 1772: *Traité des Obligations*; and in 1774: *Supplément au traité des Contrat de Louage Maritime*, etc. In these as in his later works this author adapted the reason and the equity of Roman jurisprudence to the circumstances and the practice of modern times. In his work on Obligations, there are valuable treatises on the contract of affreightment; on the hiring and wages of seamen; on averages; on ins.; on bills of exchange; and on co-partnership. It is perhaps enough to say here that the works of this writer are as familiarly known in England and the United States as in France.

1779.—A Declaration bearing date 17th Aug. this year was promulgated; its object having been to act as a corrective or supplement to the *Ordon. de la Marine*. We have not met with this document, but it is mentioned in the introduction to Emerigon's *Treatise on Ins.*, 1783; and it is there stated that, to the fact of that great writer having been consulted in regard to this Declaration, we owe his most learned work.

1783.—The great work of Emerigon: *Traité des Assurances et des Contrats à la Grosse*, was pub. This book, which is ostensibly merely a treatise on the Law of Marine Ins., Respondentia and Bottomry, is really to a considerable extent a Commentary upon the *Ordon. of 1681*. The author frequently has recourse to this *Ordon.* either in view of treating incidental questions, or by way of developing different points relative to those which form the principal object of his work. In this manner he discusses a vast number of subjects connected with the law of mercantile navigation and commerce in general. The work is one of great repute, and was done into English (by Meredith) as recently as 1850.

The French Academy of Sciences about this date endeavoured to place the bus. of Marine Ins. upon a scientific basis by the application of the *Mathematical Theory of Prob. to it*. Accordingly, a prize was this year offered for a "*Théorie des Assurances Maritimes*;" but it was not till 1787 that they received two papers on the subject; one from Biquilley, and one from Lacroix, which, much altered and corrected, appeared subsequently as treatises, by these respective authors, on the Calculus of Prob. They do not seem perceptibly to have altered the mode of conducting Marine Ins. (See 1791.)

1791.—The Academy of Sciences this year offered another prize [see 1783] in view of securing the applications of Science to the bus. of Marine Ins.; but the stirring interest in the events of the Revolution prevented any practical response.

1835.—M. Lafond gave a general summary of the total amount of Marine Ins. in force in *France* at this date, as follows:

	Amount Insured.	Average rate of Prem.	Total Prem.
	£		£
In Paris	7,000,000	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	120,000
Havre	4,000,000	1 $\frac{3}{4}$ to 1 $\frac{1}{2}$	60,000
Nantes	3,400,000	1 $\frac{3}{4}$	56,000
Bordeaux	7,000,000	1 $\frac{1}{2}$ to 1 $\frac{3}{4}$	120,000
Marseilles	8,000,000	1 $\frac{1}{2}$	120,000
Other Ports—			
Dunkirk, Lille, St. Malo, etc.	10,600,000	1 $\frac{1}{2}$	144,000
	40,000,000	1 $\frac{55}{100}$ p.c.	620,000

1837.—It was stated at this date that the average amount of marine ins. risks in *France* was from £1000 to £1200. This small average, it was said, arose from the subdivision of bus. Few houses undertook large operations on their own account; and it was customary to send small quantities of merchandize by different vessels. The largest merchant ships were not worth more than £5000 or £6000; and each ins. co. seldom took more than a third of this value. With an average of the amount above stated, the maximum risk could not prudently be taken beyond £2000 or £2400. The merchant seeking insurance was therefore recommended to ascertain beforehand what would be the average risks in any particular place, and vary the maximum offered through different agents accordingly.

1838.—Art. 37 of the *Code de Commerce* of this year embodied provisions for the regulation of "Sociétés Anonymes" estab. for the purposes of Marine Ins.

1849.—The following accounts of *L'Union des Ports*, the second largest of the marine ins. cos. of France at this date, will give the reader an insight into the manner in which the bus. was conducted in that country :

	Sums.	Premis.	p.c.
Ins. in force 31 Dec. 1848	£389,620	£11,134	2.86
New ins. during the year 1849	2,285,924	41,713	1.82
	£2,675,544	52,847	
Deduct for returns, re-assurances, and risks terminated	2,110,038	38,261	
In force 31 Dec. 1849	£565,506	14,586	2.58
The profit and loss account of the Co. stood thus :			
Losses paid, deducting salvage	£16,735	Premis. for 1849	£31,762
Deduct amount estimated for 1848	7,836	Interest	1,969
	8,899	From profit and loss account	82
Estimate for losses known for 1849	6,202		
General expenses	2,283		
Brokerage on premis.	2,210		
Commission to agents	1,189		
	20,783		
Profit in 1849	13,030		
	£33,813		£33,813

Instead of a profit in 1848, there had been a loss of £5108, which, deducted from the profit of 1849, left £7922. Out of this a div. at the rate of 9.38 p.c. was paid on the paid-up cap. of £40,200 (the nominal cap. being £200,000). The reserve in hand at this date appears to have been £70,000.

1850.—An extended classification of marine ins. premis. was settled by the brokers in Paris this year. We shall deal with this under the gen. title MARINE INS. PREMIS.

This year had proved singularly fatal to the French mercantile service. Out of 800 large French vessels constantly engaged in the navigation of the Atlantic, or on long voyages, 82 had been totally lost; being more than 10 p.c. The ann. premis. of ins. against total loss had never exceeded 6 p.c.; the disastrous results upon the cos. of this period are therefore easily understood.

The accounts of the *Lloyd Français* French Co. for this year were as follows :

	Sums ins.	Premis.	p.c.
In force 31 Dec. 1849	£346,046	£11,213	3.24
Risks covered in 1850, after deducting returns and re-assurances	1,493,294	30,565	2.05
	£1,839,340	£41,778	
Risks terminated in 1850	1,322,723	27,781	
Ins. in force 31 Dec. 1850	£516,617	£13,997	2.71

The result of this year's trading was that the losses (£28,627) were £772 beyond the premis. earned; to which add brokerage (7½ p.c.), £2084; other expenses, £1873; and discount on prompt payment of premis., with a few other items requiring to be adjusted, the loss on the year was in the whole £5057. The preceding year had involved a loss of £2060.

The total losses of the year by this Co. had been 49 in number, averaging only £420 p. vessel. In previous years the average had been nearer £1000.

Out of 14 years the Co. had been in operation as a "Société Anonyme," 10 had been favourable, producing a profit of £63,560, and 4 had been unfavourable, involving a loss of £25,880. The mean profit had been £2688 p.a. or 5½ p.c. on the paid-up cap.

Dubroca, in his *Manuel de l'Assureur*, quotes the following general summary of results from the experience of 10 years' obs. of maritime risks, extending over 105,462 pol. of ins.:

Proportion of total losses on ships of Class I.	14 p.c.
" " " Class II.	5½ "
" " " Class III.	17 "

When vessels belonging to Class I. had been wrecked, the average loss resulting therefrom was 22 p.c.; and when ships of the same class arrived in port, but with water in the

hold, the average loss had been 3 p.c. In vessels of Class II., which had been wrecked, the average loss was 67 p.c.; and the average loss in case of damage was 14 p.c. In vessels of Class III. which had been wrecked, the average total losses were 93 p.c.; and the average of loss in cases of damage was 37 p.c.

1851.—Mr. Samuel Brown read before the Inst. of Act. a paper: *Sketch of the Recent Progress of the Assu. of Life and Property on the Continent*. [*Assu. Mag.* vol. i. p. 293.] In the second part of that paper [*Assu. Mag.* vol. ii. p. 16] he furnishes the following estimate (based upon returns obtained from M. Lafond) of the amount of Marine Ins. transacted by the several cos. of that class in *Paris*, and also of the amount of bus. transacted in the several parts of the country, as indicated by the amount of prems. in each case—thus:

Paris Cos.	Premis. £	In the Provinces.	Premis. £
Compagnie Générale (Paris & Agencies)	120,000	Bordeaux.....	120,000
Union des Ports (ditto) about	48,000	Marseilles	160,000
Lloyd Française	32,000	La Havre	160,000
Réunion.....	32,000	Nantes.....	48,000
Mutuelle Générale (Paris and Agencies)	24,000	Granville.....	2,000
Vigie (ditto)	16,000	Bayonne	2,000
Chambre d'Assurances Maritimes.....	12,000	Calais, Boulogne, etc.	2,000
Securité	12,000	Lille.....	4,000
Melusine	12,000	Brest	2,000
Cercle Commercial	12,000	Dunkergue	8,000
Indemnité	8,000	La Rochelle	1,200
Océan	8,000	Cette	2,800
Neptune	8,000	Rouen	4,000
Sauvegarde	8,000	St. Malo and St. Brieux	12,000
Garonne and Gironde	8,000		
Cie. Mutuelle sur Corps de Navires	48,000		
	£408,000		£488,000

In the amount included in the Paris cos. is that of the agencies at some of the ports above enumerated: from which, therefore, it was considered ought to be deducted prob. about £88,000. The approximate result would therefore work out as follows:

Insurances in		Sums insured.
Paris about	£360,000	} which at an average rate of about } 1·55 p.c. would give } £49,032,000
French ports	400,000	
Compagnie Mutuelle sur		} at about 5 or 6 p.c. (say the latter) } 800,000
Corps de Navires	48,000	
		£49,832,000

This amount (calculated we assume upon the returns of 1850) shows an increase, when compared with 1835, of nearly £10,000,000, or 25 p.c. on the total at that period; the principal difference being in the *Paris* bus. It was thought that the bus. in the provinces was rather understated.

1854.—The aggregate amount of the marine ins. effected in France this year was estimated at £58,400,000. Of this sum there was ins. in *Paris* £16,000,000; in *Bordeaux* £10,000,000; in *Havre* £8,000,000; in *Marseilles* £13,600,000. The remainder in other places.

1856.—An examination into the number and nature of losses of French vessels during this year was made. The result will be presented under gen. title of MARITIME LOSSES.

1860.—There were about 40 marine ins. cos. operating in *Paris* at this date, mostly proprietary. Their income from prems. was estimated at £720,000, the sum insured at £32,000,000, so that the average rate was a little under 2 p.c. There were other asso.—many of them mut.—operating in the provincial ports.

1867.—The new law of 24 July this year applied to marine ins. cos.; and under it have been estab. some cos. known as *Libres* [Free] Sociétés.

1868.—There were 49 marine ins. asso. operating in France; of these 48 were proprietary, and 1 (*Les Annis*, of Nantes) mutual. The 48 joint-stock cos. had a nominal cap. of 84 million fr. (£3,360,000)—usually from 1 to 2 millions p. co. The paid-up cap. was about one-fifth. The sums insured by these cos. this year reached the total of £82,286,849; the prems. thereon amounted to £1,420,574; while the losses (less salvages) reached £1,062,963; leaving a bal. of £357,611. The average prem. was 1·72 and the losses 1·29 p.c. The bus. showed a considerable increase over the preceding year.

Paris, although essentially an inland city, was becoming in a very marked degree the centre of the bus. of marine ins. At this date 26 of the cos. were located in the capital. The remaining 22 were in the towns following: *Havre*, 13; *Bordeaux*, 6; *Marseilles*, 2; *Brest*, 1. The *Paris* cos. transacted more than half the bus. of the country. The following details will be found useful for reference:

	Sum insured.	PREMIUMS.		LOSSES.	
		Total.	Per cent. Average.	Total.	Per cent. Average.
Paris.....	£ 54,803,486	£ 964,426	1'75	£ 719,382	1'31
Bordeaux.....	12,513,253	211,600	1'69	144,080	1'23
Havre.....	11,612,896	179,491	1'63	133,739	1'15
Marseilles.....	1,410,342	20,940	1'48	27,990	1'98
Brest.....	1,956,871	34,115	1'74	27,770	1'42

The bus. in *Marseilles* shows a considerable falling off when contrasted with previous periods.

1870.—There were 51 marine ins. cos. in operation in France this year. The amount underwritten by these cos. during the year was £17,008,876. The prems. thereon amounted to £282,192; the losses of the year £159,850.

The French mercantile marine at this date comprised 4968 vessels, with an aggregate tonnage of 891,828 tons, standing as No. 6 in the mercantile navies of the world.

1874.—The losses of the marine ins. cos. of France upon their prem. income this year was at the rate of 84 p.c. The Co. paying the highest dividend to its proprietors on the year was *La Melusine*, 15½ p.c.; the *Assurances Générales*, 12 p.c.; *Lloyd Français*, 5 p.c.

1875.—The losses of the French marine ins. cos. this year were 78 p.c. of the prem. income. *La Melusine* paid a div. of 28 p.c. on its paid-up cap.; *Assurances Générales*, 20 p.c.; *Lloyd Français*, 15; *La Française* and *Prudence* each 14 p.c.

1876.—At the end of this year we believe there were 53 marine ins. asso. operating in France; 52 proprietary, 1 mut. No less than 16 marine ins. cos. have passed into liq. since 1860, involving a cap. of 13½ millions of fr. (£540,000). In only one of these cases did the co. go into bankruptcy, i.e. pass beyond the control of the creditors; and only in two other cases did the pol.-holders sustain any loss, viz. in the *Sauvegarde*, where the div. was 54 p.c., and in the *Afrique Française*, where the div. was 40 p.c. See sub-heading *Liq. of Ins. Cos.*

The marine ins. cos. of Havre underwrote during this year, £12,265,042; the prem. thereon amounting to £184,868, or 1½ p.c. The profits realized amounted to £20,831, being 16½ (16'79) p.c. on the paid up-cap. of the cos. This was regarded as a very good year.

Two of the French marine ins. offices have agencies in Lond., viz. *La Melusine* (1838), and *Le Prévoyance* (1869). They are represented by M. Albo de Bernalés. There may be others.

The following we believe to be a complete T. of the Marine Ins. Asso. founded in France, proprietary or mut.:

Date.	Name of Co.	Location.	Fate, etc.
1668	Office of Ins. (See text)	Paris	
1686	Gen. Asso. for Ins. and Bottomry	"	
1751	Société Emanuel Weis & Co. (See text)	"	
1770	Chamber of Ins.	"	
1817	Cie. d'Assurance Maritime de Nantes	Nantes	Died out.
"	" de Rouen	Rouen	"
1818	" Commerciale d'Assurances Maritimes	Paris	"
"	" d'Assurances Générales	"	Existing.
"	" d'Assurances Maritimes de Bordeaux	Bordeaux	Died out.
"	" d'Assu. Maritimes contre les Risques de la Guerre	Paris	"
1820	" Royal d'Assurances Maritimes	"	"
1822	" Nantaise	Nantes	"
1832	Société d'Assurances Maritimes du Havre	Havre	"
1833	Cie. d'Alliance	"	"
1834	" Française (now Cie. Commercial)	"	Existing.
1836	" du Globe	Rouen	Died out.
"	" de la Sécurité	Paris	Existing.
"	" de la Paix	Havre	Died out.
"	" de l'Union des Portes	Paris	Existing.
"	" de l'Indemnité	"	Died out.
"	" Havraise et Parisienne	Havre	Existing.
1837	" Lloyd Français	Paris	"
"	" L'Océan	"	"

Date.	Name of Co.	Location.	Fate, etc.
1837	Cie. Chambre des Assurances Maritimes	Paris	Existing.
1838	„ Union du Nord	Dunkerque	Died out.
„	„ la Melusine	Paris	Existing.
„	„ l'Avenir	„	Died out.
„	„ la Gironde	Bordeaux	„
„	„ Riveraine d'Assu. contre les Risques de la Navigation sur la Saône, et la Rhône, sur l'Yonne, d'Auxerre à Montereau, et sur la Haute Seine de Montereau à Paris	Gray Haute Saône	} Died out.
1841	„ d'Assurances Maritimes L'Armorique	Paris	„
1843	„ Bordelaise	Bordeaux	Existing.
„	„ la Fortune	Havre	„
„	Comptoir Parisien d'Assurances Maritimes	Paris	Died out.
1844	L'Espérance	„	„
„	Le Neptune	„	„
„	La Garonne	Bordeaux	„
„	Le Trident	Paris	„
„	La Boussole	Havre	„
„	Les Deux Mondes	„	Existing.
„	Le Lloyd Havrais	„	Died out.
1845	La Néréide (Maritimes et Intérieures)	Paris	„
„	La Vigie	„	Existing.
1849	Le Commerce	Havre	„
1852	Le Pilote	Paris	„
1853	Cie. Français de prêts à la Grosse	„	„
„	L'Equité	Havre	„
„	L'Espérance	„	„
„	Société les Annis (Mutuelle)	Nantes	„
1854	La Centrale	Paris	„
1855	La Réunion	„	„
„	L'Eole	„	„
1856	L'Indemnité	„	„
„	La Seine	„	„
„	Le Triton	„	„
„	L'Universelle	„	„
„	La Compagnie Marseillaise	Marseille	In liquidation.
1857	Le Comptoir Maritime	Paris	Existing.
1858	L'Etoile de la Mer	„	„
1859	La Cie. d'Assurances Maritimes	Bordeaux	„
1860	Le Cercle Commercial	Paris	„
„	L'Equateur	Havre	„
1861	La Gironde	Bordeaux	„
1862	Cie. Française d'Assurances Maritimes	Paris	„
„	La Gauloise	Havre	„
„	La Manche	„	„
„	La Compagnie Nouvelle	„	„
1863	La Guienne Maritime	Bordeaux	„
„	L'Industrie Française	Marseille	In liquidation.
1864	L'Internationale	Paris	Existing.
„	La Garonne	Bordeaux	„
1865	La Sphère	Paris	„
„	Les Deux-Pôles	Havre	„
1866	La Confiance Maritime	Paris	„
1867	La Chambre d'Assurances	„	„
1868	La Mer	„	„
„	L'Atlantique	Havre	„
1869	La Providence Maritime	Paris	„
„	La Prévoyance	„	„
„	La Cie. Lyonnaise d'Assu. Maritimes	Lyons	„
„	Cie. Speciale d'Assu. et de Ré-assurances Maritimes	Paris	„
1870	La Maritime	„	„
„	Cie. d'Assurances de Paris	„	„
1871	La Prudence Maritime	„	„
1872	La Navigation	„	„
1874	Le Neptune	„	„
„	Cie. d'Assu. Fluviaux du Nord	Lille	In liquidation.

Date.	Name of Co.	Location.	Fate, etc.
Date unknown.	La Flotte	?	Liquidated.
"	L'Aquitaine	Bordeaux	"
"	La Phare	?	"
"	Le Lloyd Bordelaise	Bordeaux	"
"	L'Egide	?	"
"	Le Globe	Havre	"
"	La Marine	?	"
"	La Perseverance	Havre	"
"	Le Méridien	?	"
"	L'Espérance	Paris	"
"	L'Amphitrite	"	"
"	Le Trident	"	"
"	La Garantie	?	"
"	La Minerve	?	"
"	La France Maritime	?	"
"	Le Semaphore	Paris	"
"	L'Abeille	"	"
"	Le Transatlantique	"	"
"	Le Caisse Général	?	"
"	L'Arche d'Alliance	?	"
"	Le Sauvegarde	?	"
"	L'Afrique Française	?	"

Marine Ins. (Practice).—The practice of Marine Ins. in France is regulated to an unusual degree of minuteness by the stipulations of the Marine Ordin.; while disputes are settled by Tribunals of Commerce, and not by the Courts of Law. Hence there is not much to be said under this head.

Brokerage.This on marine prems. in France is $7\frac{1}{2}$ p.c.

Brokers.Emerigon speaks of the custom of the marine ins. brokers of Marseilles at this date of his writing. On the pol. was written *A. B. insures the sum of Received for the prem.—per centum.* The word "received" (he continues) which, according to the rules of law and of ordinary language, signifies the actual reception of money and operates as a final acquittance, has no such meaning in the language of the broker's office. The insurer who wrote and signed that he had received the prem., had received it not. The insured who bore this acquittance in hand, was not entirely liberated; but by a strange kind of *novation*, founded in the minds of the parties only, the insured owed the prem. to the broker alone, and the latter owed it to the insurers; so that the two contracting parties were unconnected by any liability, and the broker, laying aside his character of mediator and public officer, became creditor to the one and debtor to the other.

Brokers in the U.K. frequently insure in their own names, and indorse the pol. over to the person beneficially interested.

Freight.The Marine Ordin. forbid, as we have seen, the ins. of freight. On what principle this restriction was founded does not appear. In practice it has led to unfortunate results.—*Honour Pol.*

Honour Pol.The Marine Ordin. of France forbids the ins. of freight; and is strict in the matter of insurable interest. The result is that a system of "honour pol." has been devised—called *bonne arrivee*, under which no account of insurable interest is to be demanded; but freight, profit, or any imaginable thing may be insured. It is a kind of bet depending upon the arrival or loss of the ship. These pol. are now issued all over the Continent of Europe: hence what was first designed as a means of remedying a foolish restriction, has had the effect of leading to an open system of gambling, and of consequent fraud.

Intelligence Committee.The marine ins. cos. of France organized about 1836, we believe, a *Comité des Assurances Maritimes*, in view of the collection of information, necessary to facilitate the operations of the underwriters, from all parts of the globe, much after the manner of "Lloyds." The news received is communicated to all the cos. interested; and the expenses of the organization are covered by a *pro rata* contribution.

Policy.The form of marine pol. in use in France differs very materially in many of its provisions from what is known as a "Lloyds Pol." It necessarily follows the provisions of the Marine Ordin. of France, already quoted. We shall give a copy of it *in extenso* under the gen. title MARINE INS. POL., where it will be brought into contrast with those in use in other countries.

Premiums.The prems. for marine ins. are so continuously affected by competition in various countries that they must always bear a general approximation. But on the other hand the underwriters of each country have in the long run to be guided by their own experience. Thus at the close of 1873 the French marine underwriters found the rates which they had been charging for merchandize shipped in steamers, and for the steamers

themselves, were not remunerative. They therefore put up the rates, and resolved even then to exercise the greatest caution in the acceptance of such risks. Regarding sailing vessels they had had a much more favourable experience, and it was resolved to write merchandize by these at reduced rates. The belief at Lloyds (Lond.) was that the change in regard to steamers would have the effect of transferring much of that class of bus. to English underwriters, who were already largely engaged upon French mercantile risks.

A commission or discount is allowed for the payment of prems. in advance, *i.e.* before the termination of the voyage insured against.

Profits, Ins. of.—Art. 347 of the *Code de Commerce* declares null and void, ins. made upon (1) freight, (2) on profits to be realized on merchandize in course of transport, and (3) maritime profits on sums lent on bottomry. Here the prohibition is clearly directed against the ins. of *profits* in any form. The Marine Ordin. of 1681 contains a similar prohibition.

Re-insurance.—In 1869 there was founded in Paris the *Compagnie d'Assurance et de Ré-assurance Maritimes*.

Re-insurance Fund.—In Marine Ins. it is the practice to regard the prem. as earned only when the risk is terminated. Hence the re-insurance fund in regard to the bus., or any portion of the bus., of a marine underwriter, is the whole prem. received in respect of such risks. The practice in this regard is the same in France as in Eng.

Military Service, Ins. against.—See *Conscription, Ins. Against*. [MILITARY SERVICE, INS. AGAINST.]

Mortality Tables (French).—We have now to pass under review the several Mort. T. which have been deduced from obs. on life in France; and to offer such remarks thereon as may be necessary to elucidate either their own features, or their bearing upon other sections of this art.

1746.—M. Deparcieux's Mort. T. was pub. We have given a detailed account of it under DEPARCIEUX'S (FRENCH) MORT. T.

Upon this T. the annuity operations of the French life offices are based; their life bus. being mainly based upon Duvillard's T., see 1806. (See also 1860 and 1876.)

1749.—The Mort. T. calculated by Count de Buffon from the data collected by M. Dupré de St.-Maur, a member of the French Academy, was pub. this year, and is set out in detail under BUFFON, COUNT DE, MORT. T. OF. Buffon regarded this T. as the *only one* by which the prob. of human life (in France) could then be ascertained with any certainty.

1766.—In *Recherches sur la Population*, etc., pub. by M. Messance this year, he gave a T. showing the numbers who had died at all ages during a period of 10 years in 2 towns and 13 parishes in the Generalities of Lyon and Rouen, of which the annexed is a summary:

1779.—Mons. de Saint-Cyran pub.: *Calcul des Rentes Viagères sur une et sur plusieurs Têtes*, wherein he pointed out and corrected many of the anomalies in Buffon's (Dupré Saint-Maur's) T.

1781.—M. Florencourt published his work on Political Economy, wherein he gave a T. of annuity values for single lives, computed from Deparcieux's T. of mortality, but making the annu. payable at the end of every year the life attained.

1795.—Mons. J. A. Mourgue read before the National Institute of France a *Memoir on the Marriages, Births, and Deaths, that took place amongst the Inhabitants of Montpellier during the 21 successive years from 1772 to 1792, inclusive*. From these data he deduced a T. which was considered to exhibit the law of mort. and the expec. of life in France more correctly than any T. previously existing. This T. was pub. in separate form in Paris in 1808. We shall present a full outline of it under MONTPELLIER T. OF MORT.—see T. of "Expectations" in this section.

1806.—M. Duvillard's T. was pub. this year. We have given it, accompanied with varied information concerning it, under DUVILLARD'S (FRENCH) MORT. T. By it the mean duration of life in France is 28.76 years.

M. Maas, in vol. i. of *Journal des Actuaires Français* (1872), offers the following obs. on this T.:

The Duvillard T. was pub. in France in 1806, in a treatise on mort. arising from smallpox (*Analyse et tableaux de l'influence de la petite verole sur la mortalité à chaque âge et de celle qu'un préservatif tel que la vaccine peut avoir sur la population et la longévité*, by E. E. Duvillard, ancien directeur-juré de la liquidation de la dette publique viagère pour la partie scientifique). The author says very little of the source of his observations, and of the method he followed in constructing his T. He only informs his readers, by a note, that this T. is the result of a considerable number of obs. made in different parts of France before the Revolution, and that it is based upon 101,542 deaths at different ages, taken in a pop. of 2,020,672 persons. Duvillard assigned unity for the number of births, and, consequently, the numbers following are expressed in decimal fractions to seven places. The radix of the T. must, therefore, be multiplied by ten millions, to bring it up to whole numbers; but the T. pub. by the *Annuaire du Bureau des Longitudes* starts with 1 million only, which is quite sufficient.

Died under	5	2167
From 5 to	10	290
10 "	20	279
20 "	30	309
30 "	40	307
40 "	50	297
50 "	60	315
60 "	70	341
70 "	80	364
80 "	90	195
90 "	100	22
		4884

Does this T. give a higher or lower mort. than the general mort. of the present day in France? It is extremely difficult to say, on account of insufficient statistical information. It is very certain that, since the last century, longevity has increased. Thus, according to the obs. made by order of the Gov. from 1799 to 1802, in thirty departments, the average of deaths was 3'33 per 100; whilst, according to obs. made during forty-four years, from 1817 to 1860, recorded in the *Annuaire du Bureau des Longitudes*, the average of the general mort. was lowered to 2'77 per 100. On the other hand, the average duration of life was successively raised from 32 to 34 and to 37 years from 1824 to 1852.

Comparing these data with those furnished by the Duvillard T., we see clearly that at year 0 the expectation is only 29 years; but this point of departure is deceptive on account of the great number of deaths indicated by this T. from year 0 to year 1; and at 20 years the average life calculated on certain indications of the *annuaire* is not much greater than that given by Duvillard. Further, it is certain that in the very advanced ages the mort. according to this last T. is much too low. It is therefore not because this T. gives a mort. sensibly greater than the general mort. that its adoption procures to the assurers a profit of a certain amount, it is because the assurers, by the choice made of the assured and by the elimination of doubtful lives, must necessarily obtain a lighter mort. than the ordinary average.

In 1818, when the *Compagnie Générale* was organizing its life department, the Council of State objected to the selection of this T. as the basis for its rates on the ground that it would leave the company too much profit. The objection was not persisted in; and the company adopted the T.; and it has been adopted by nearly all the later formed life cos. of France.

This T. underwent some revision by M. Demontferrand. (See 1838.)

1821-9.—During these years there was issued from the Board of Statistics for the Prefecture of the Seine, in 4 vols., *Recherches statistiques sur la Ville de Paris*, compiled, as is now known, by M. Joseph Fourier, and containing papers on the formation of pop. and life T., and on the value of the mean of obs. These are regarded as of great authority. [PARIS.]

1838.—About this date M. Demontferrand's T. was made public. He had been many years engaged upon the investigations which led to their completion. Before 1825 it was understood that he had carefully revised and corrected M. Duvillard's T. His later corrections were believed to have been drawn from the pop. returns given in the *Annuaire du Bureau des Longitudes*.

We have given an account of this T. under DEMONTFERRAND'S (FRENCH) MORT. T.

The following remarks made by the commission appointed to confer the *Montyon Prize* on M. Demontferrand in the name of the *Institut* of France, appear to realize the idea of the T. being imperfect:

A life T. carrying on its face the authentic characters of truth, and by means of which life assu. could be equitably made, is very much desired (*vivement désiré*); we may say that it would be a public benefit.

If it were admitted that any T. represented with a high degree of probability the laws of mort. in France, they would become the basis of the greater part of the speculations involving the duration of human life; the mass of interests engaged on the faith of the tables might become immense, and if practice proved that the tables were inexact, the authority by which they had been sanctioned would be exposed to the blame and censure of those who had been injured by the use of them; we are therefore persuaded that propositions which involve the Academy in so much responsibility should be made to it with the greatest circumspection.—*Journal de l'Ecole Polytechnique*, cahier 26, pp. 314-5.

1839.—Mons. Mathieu, a member of the *Institut* of France, pub. in the *Annuaire du Bureau des Longitudes* for this year, a paper wherein he showed that the mean duration of life in France was on the increase. The T. of Duvillard, based upon data which preceded the first Revolution, fixed the mean at 28½ years. The calculations here presented brought it up to 32½ (32'70). It has been more recently asserted, by M. Bertillon, that the mean duration is now nearer 40 years.

1843.—The Reg.-Gen. of Eng., in his 5th Ann. Rep. pub. this year, said: "France has no accurate Life T.; nor have the data from which a Life T. can be constructed, namely, the ages of the living and dying, ever been pub." And again: "The mean duration of life in France, according to Duvillard's T., is only 28'76 years. The duration of life is, I believe, longer in England than in any other country; but it is scarcely credible that the lives of Frenchmen should be 12 years shorter than the lives of Englishmen, and 10 years shorter than the lives of Swedes. The T. prob. involves the same errors as the *Northampton T.*"

1852.—There was pub. in Paris by Mons. M. G. Hubbard: *Mémoire sur l'Histoire et l'Organisation des Sociétés de Secours Mutuels*. The circumstances which led to the pub. of the memoir originated in the appointment of the Committee of 1849, as already set forth under sub-heading *Friendly Sos.* at that date. The Committee, finding the data upon which these sos. were operating to be exceedingly defective, sent out forms for a new collection of facts as to the sickness and mort. experienced among their members. The returns were so far satisfactory that in 1851 they were placed in the hands of Mons. Hubbard, the Sec. of the Committee, and he, with the mathematical assistance of M. Olinde Rodrigues (who had already written on the *Caisse de Retraite*), produced two T. which embodied the facts of the T. which will be found under our general title *FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF*, at this date.

1855.—Mr. Samuel Brown read before the Inst. of Act. a paper: *On the Rate of Sickness and Mort. amongst the Members of Friendly Sos. in France* [*Assu. Mag.* vol. v. p. 208], wherein he presented a mass of interesting information on the subject. Some of

this has already been presented under sub-heading *Friendly Societies*; other portions will be reviewed under the general title FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF.

1856.—M. Quetelet pub. his T. of Mort. for *Belgium*. The circumstances of, and mode of life in, the two countries being very similar, reference should be made to this T. See BELGIUM, T. OF MORT. FOR.

1860.—Three of the principal life offices of France, viz. the *Générale*, the *Nationale*, and *l'Union*, contributed their mort. experience in regard to annuitants of the ages 50 to 85, and the combined results are shown in col. 3 of the following T., in comparison with *Deparcieux's* and other Mort. T.

Table showing the numbers out of 1000 annuitants living at age 50 surviving to each following age up to 84.

Age.	Deparcieux's T. 1746.	Three French Cos. 1860.	Tontine Lafarge 1867.	English Gov. Annuitants (Finlaison) 1829.		Experience T. No. 2 1872.
				Males.	Females.	
50	1000'	1000'	1000'	1000'	1000'	1000'
51	982'79	986'28	986'28	982'58	986'35	984'23
52	963'86	972'56	972'26	964'34	972'43	967'99
53	944'93	958'44	957'38	945'32	958'22	951'23
54	925'99	945'12	942'25	925'60	943'70	933'82
55	905'34	931'40	926'76	905'27	928'84	915'67
56	884'69	917'68	910'77	884'45	913'62	896'77
57	864'03	902'24	893'85	863'22	898'03	877'09
58	841'65	886'80	876'33	841'66	882'02	856'61
59	819'28	869'65	858'03	819'78	865'50	835'29
60	796'91	852'50	838'47	797'55	848'47	813'00
61	774'54	835'35	816'92	774'85	830'74	789'66
62	752'17	816'48	794'42	751'51	812'14	765'15
63	728'08	797'61	770'81	727'34	792'51	739'41
64	703'99	777'02	746'55	702'18	771'67	712'46
65	679'90	756'44	720'43	675'90	749'51	684'42
66	654'09	735'86	692'92	648'43	725'99	655'45
67	626'55	713'56	663'65	619'74	701'12	625'68
68	597'30	689'55	633'28	589'88	674'95	595'24
69	566'32	662'11	602'75	558'97	647'55	564'27
70	533'62	632'95	571'51	527'17	619'00	532'69
71	500'92	602'07	538'64	494'78	589'41	500'23
72	466'50	571'20	504'58	462'12	558'89	466'79
73	432'08	538'61	469'21	429'49	527'54	432'40
74	397'66	506'02	432'52	397'14	495'47	397'15
75	363'24	473'43	397'25	365'26	462'79	361'40
76	330'54	439'13	361'11	333'85	429'56	326'00
77	297'83	404'83	325'73	302'87	395'86	291'51
78	265'12	370'52	290'55	272'34	361'84	258'51
79	234'14	336'21	257'16	242'41	327'73	227'21
80	203'16	301'90	225'00	213'31	293'86	197'82
81	173'70	267'59	194'90	185'47	260'65	170'39
82	146'36	235'00	166'76	159'29	228'55	144'99
83	122'26	204'12	140'37	135'11	198'00	119'72
84	101'60	174'96	116'27	113'18	169'38	97'14
85	82'66	147'51	94'28	93'62	142'98	77'45

When it is remembered that the annu. bus. of France has been mainly based upon *Deparcieux's* T., we shall be in some measure prepared for the results to be stated under date 1876. We derive this T. from M. de Kertanguy's paper in *Journal des Actuaires Français*, 1876.

1867.—The work of M. Ernest Beauvisage pub. this year, and of which we have given the full title under sub-heading *Ins. Literature*, contained reprints of several French and English Mort. T.; but did not contain any orig. T., with the exception of that based upon the annuitants of the *Tontine Lafarge*.

It seems that M. Beauvisage, who is, or was, "*Chef du Service de la Caisse de Rétirées pour la Vieillesse, à la Caisse des Dépôts et Consignations*," had the means of access to the registers of the members of the *Tontine Lafarge*, from which he obtained the following details. The number of members enrolled in 1792 was 116,000. The observations now available had extended over the period from 1792 to 1864, or 72 years; but out of 110,000 deaths supposed to have occurred during that period, there were facts concerning only 38,951 deaths available. From this data M. Beauvisage constructed his

T., which we proceed to give. In the *Tontine Lafarge* no lives were inrolled under age 3,—the T. therefore commences at that age :

T. showing the numbers out of 1000 annuants at age 3, surviving at each subsequent age of life. [Tontine Lafarge.]

Ages.	Living.	Ages.	Living.	Ages.	Living.	Ages.	Living.	Ages.	Living.
3	1000	24	873	45	734	66	479	86	52
4	990	25	865	46	727	67	459	87	41
5	982	26	858	47	719	68	438	88	32
6	977	27	850	48	710	69	417	89	24
7	972	28	843	49	701	70	395	90	18
8	968	29	835	50	692	71	373	91	13
9	964	30	828	51	682	72	349	92	9
10	960	31	822	52	673	73	324	93	6
11	956	32	816	53	662	74	300	94	4
12	952	33	809	54	652	75	275	95	3
13	947	34	803	55	641	76	250	96	2
14	943	35	797	56	630	77	225	97	1
15	938	36	791	57	618	78	201	98	73
16	933	37	785	58	606	79	178	99	41
17	928	38	779	59	594	80	156	100	24
18	922	39	773	60	580	81	135	101	13
19	914	40	766	61	565	82	115	102	08
20	906	41	760	62	550	83	97	103	04
21	898	42	754	63	533	84	80	104	02
22	889	43	748	64	516	85	65	105	01
23	881	44	741	65	498				

The "expectation" of life shown by this T. we shall give in comparison with the expectation of other French T. at the close of this section. The mort. shown by it at the later ages of life—50 and upwards—we have already given under date 1860, in regard to the special purpose there in view.

The fact of this data being available renders it clear that the *Tontine Lafarge* did not entirely collapse in the manner indicated in sec. *Annu. on Lives* in this art., date 1791. In fact, through the courtesy of the son of the late M. Beauvisage (who died on the 20th of February, 1869), we find, at the moment of going to press, that the office of the administration of the *Tontine Lafarge* still exists, at 46, Rue St. Annés, Paris. We have endeavoured previously in other quarters to obtain the exact facts, but without success. We shall hope to make the history more complete under our general article TONTINES.

1869.—*Le Gaulois* pub. a statistical table, said to be compiled from official returns, of the average ages attained by members of different professions in France. The results were thus given: priests, 57'3 years; judges, 56'4; lawyers, 56'1; doctors, 56'0; bankers, 54'7; librarians, 50'5. [OCCUPATIONS.]

1870.—Mons. A. Bertillon, at the instance of the late M. Quetelet, prepared a Mort. T. based upon the general pop. of France. The T. (with some others) appeared in the 13th vol. of the *Bulletin de la Commission centrale de Statistique Belge*, 1872. The method employed in the construction of the T. is that described in detail in the *Journal de la Société de Statistique de Paris*, 1866, by M. Bertillon. As we have neither of these works available for reference, it will be sufficient to state that the method of construction is the same as that employed by Dr. Farr in the *English Mort. T.* The T. has since been corrected by M. Bertillon under the following circumstances, set forth in a letter from that gentleman to the writer, under date 20.7.1877, viz.:

In France, as in many countries (in England certainly more than in France), a certain number of newly-born children die soon after birth, and are considered as stillborn, and unduly lessen the number of the living. They are what I call the "falsely stillborn"—*faux mort-nés*.

In France we do not know what is the number of these *faux mort-nés*, but Belgian statistics (Belgium is subject to the same code, and almost the same characteristics as ourselves, and therefore I have supposed that the same conclusions will apply to the one as to the other) having made that analysis, the result has been to show that out of 1000 declared as stillborn, only 777 were, strictly speaking, so born, and that 223, although dead before their regis. (*French and Belgian laws allow 3 days for regis., Italy 5, and England six weeks*), had breathed. Then out of 1000 stillborn children there are 223 falsely so called. It is owing to that, that I made the correction in the tables of which I have spoken, and which I sent to Quetelet, and were pub. by him. But I have a scruple that I had not perhaps any right to make that correction, inasmuch as, that error which lightens especially the mort. of the first year, and as a consequence augments the number of the survivors at all ages, affects materially all mort. tables, excepting perhaps those of the Scandinavians. That is why, with the tables that I sent to Quetelet, I send you others upon which the correction as to the *faux mort-nés* is not made.

We have therefore presented side by side the T. orig. prepared, and the T. corrected under the circumstances named :

Life T. for France based upon the deaths in France during the 10 years 1857-66, and the Censuses of 1856, 1861, and 1866.

1. With correction, "pour les faux mort-nés."			2. Without such cor- rection, as explained in text.		1. With correction, "pour les faux mort-nés."			2. Without such cor- rection, as explained in text.	
Ages.	Males.	Females.	Males.	Females.	Ages.	Males.	Females.	Males.	Females.
0	10000	10000	10000	10000	51	4592	4742	4634.75	4763.42
1	7982	8287	8080	8356	52	4518	4674	4560.85	4694.42
2	7502	7801	7594	7866	53	4441	4604	4483.35	4623.62
3	7243	7534	7332.2	7597	54	4360	4530	4398.25	4547.52
4	7076	7359	7163.1	7420.7	55	4276	4452	4310.15	4467.32
5	6958	7235	7044.1	7295.5	56	4189	4369	4219.25	4387.12
6	6880	7152	6964.2	7211.4	57	4098	4282	4126.85	4303.32
7	6818	7084	6900.8	7143.0	58	4004	4190	4032.25	4215.33
8	6766	7028	6848.8	7086.9	59	3904	4093	3935.75	4125.33
9	6722	6981	6802.2	7038.	60	3797	3988	3837.	4030.83
10	6683	6938	6759.1	6991.65	61	3684	3878	3728.60	3914.93
11	6649	6898	6723.7	6950.	62	3563	3760	3605.	3793.83
12	6618	6861	6690.25	6909.80	63	3436	3635	3475.9	3666.83
13	6588	6824	6659.65	6871.70	64	3302	3504	3342.40	3537.33
14	6559	6788	6629.85	6836.10	65	3161	3365	3203.50	3404.33
15	6528	6752	6598.35	6797.50	66	3015	3222	3058.50	3260.83
16	6495	6712	6564.85	6754.3	67	2864	3072	2905.	3113.63
17	6458	6670	6527.45	6707.55	68	2708	2917	2747.5	2959.13
18	6415	6624	6484.20	6657.30	69	2550	2756	2590.	2798.23
19	6366	6574	6435.05	6601.80	70	2390	2589	2435.1	2636.33
20	6312	6520	6380.15	6644.30	71	2229	2417	2277.4	2451.83
21	6252	6463	6320.15	6486.70	72	2069	2241	2118.5	2270.73
22	6188	6405	6257.25	6429.90	73	1910	2064	1957.1	2093.23
23	6123	6345	6190.65	6371.30	74	1752	1887	1792.6	1919.03
24	6057	6285	6124.55	6310.82	75	1594	1713	1626.	1747.83
25	5995	6224	6060.95	6250.22	76	1438	1544	1459.5	1578.33
26	5936	6165	6003.35	6191.12	77	1284	1381	1298.1	1415.33
27	5884	6108	5949.80	6133.57	78	1133	1226	1145.5	1257.43
28	5836	6052	5901.	6077.57	79	987	1081	999.	1107.43
29	5791	5996	5855.20	6021.47	80	850	945	855.	967.43
30	5746	5939	5810.20	5965.37	81	722	819	722.5	834.03
31	5702	5883	5763.90	5909.12	82	604	704	602.1	707.03
32	5657	5827	5715.90	5852.87	83	499	598	493.1	589.83
33	5611	5771	5667.20	5796.57	84	405	503	395.5	486.33
34	5565	5714	5618.60	5740.57	85	324	417	316.5	398.03
35	5519	5659	5570.	5684.97	86	255	342	253.	322.43
36	5472	5604	5521.20	5639.47	87	197.3	276	198.85	258.53
37	5424	5548	5471.2	5584.57	88	150.1	219	194.1	204.13
38	5375	5494	5420.9	5529.57	89	112.1	172	118.62	157.78
39	5325	5438	5370.45	5474.57	90	82.1	133	90.42	121.63
40	5273	5383	5318.75	5419.97	91	58.9	101	68.2	93.24
41	5219	5327	5267.15	5362.22	92	41.4	75	50.67	71.34
42	5164	5271	5211.55	5303.97	93	28.4	55	37.07	54.30
43	5106	5215	5153.15	5245.97	94	19.	39.6	26.71	40.99
44	5048	5158	5094.25	5188.07	95	12.4	28	18.95	30.30
45	4987	5101	5032.45	5130.27	96	7.9	19.3	13.17	21.56
46	4926	5044	4969.85	5071.67	97	4.9	13	8.85	15.15
47	4862	4986	4905.79	5012.57	98	2.9	8.5	5.90	10.11
48	4797	4928	4840.5	4953.27	99	1.7	5.4	3.735	6.06
49	4731	4868	4773.65	4891.67	100	1.53	3.33	2.204	3.07
50	4663	4806	4705.35	4828.62					1.20

1874.—Mons. M. E. de Kertanguy prepared a new French Mort. T., based upon the experience of the *Cie. d'Assurances Générales sur le Vie*, during the 36 years from 1 Jan. 1837 to 31 Dec. 1872. A very full account of the mode of constructing this T. is contained in an able paper contributed by M. Kertanguy to the *Journal des Actuaires Français*, vol. iii. (1874) [since reprinted in separate form, a copy of which we gratefully acknowledge], from which we draw the following details. The number of lives brought under observation is 24,699, viz. 20,800 males, and 3899 females. The number of pol. issued on these lives was 28,427, of which 23,478 were whole life (*vie entière*) pol.; 4021 endowment (*mixtes*) pol.; 540 survivorship (*survie*) pol.; and 388 term (*à terme fixe*) pol.

In collecting and arranging the data, as in deducing the results from it, the plan adopted in the preparation for and construction of *Experience T. No. 2*, appears to have been generally followed; with some improvements in the details, as the adoption of cards of distinct colours for each distinct class of pol., and of distinctive letters for male and female lives; and some adaptations to the differences in the practice of life bus. in the two countries. Finally the following T. is deduced:

Table of the Mort. Experience of the French Life Co. Générale—Male and Female Lives combined; results ungraduated; ratio of 10,000 lives:

Age.	Living.	Dying.	Prob. of living a year.	Prob. of dying in a year.	Expectation.	Age.	Living.	Dying.	Prob. of living a year.	Prob. of dying in a year.	Expectation.
20	9554	73	'99238	'00762	41'87	57	6395	134	'97899	'02101	15'00
21	9481	83	'99129	'00871	41'19	58	6261	196	'96877	'03123	14'31
22	9398	99	'98949	'01051	40'54	59	6065	86	'95857	'04143	13'76
23	9299	67	'99276	'00724	39'97	60	5979	214	'96416	'03584	12'05
24	9232	62	'99124	'00876	39'26	61	5765	269	'95339	'04661	12'41
25	9170	28	'99695	'00305	38'52	62	5496	236	'95099	'04301	11'99
26	9142	43	'99532	'00468	37'84	63	5260	164	'96880	'03120	11'51
27	9099	61	'99335	'00665	36'81	64	5066	208	'95926	'04074	10'86
28	9038	30	'99669	'00331	36'06	65	4888	305	'93761	'06239	10'31
29	9008	81	'99102	'00898	35'17	66	4583	242	'94711	'05289	9'96
30	8927	91	'98981	'01019	34'49	67	4341	212	'95114	'04886	9'49
31	8836	71	'99202	'00798	33'84	68	4129	234	'94338	'05662	8'95
32	8765	58	'99338	'00662	33'11	69	3895	279	'92842	'07158	8'45
33	8707	57	'99345	'00655	32'33	70	3616	187	'94839	'05161	8'07
34	8650	58	'99331	'00669	31'54	71	3429	295	'91402	'08598	7'48
35	8592	65	'99244	'00756	30'75	72	3134	256	'91837	'08163	7'14
36	8527	73	'99145	'00855	29'98	73	2878	342	'88134	'11866	6'73
37	8454	77	'99094	'00906	29'23	74	2536	353	'86087	'13913	6'57
38	8377	59	'99291	'00709	28'50	75	2183	292	'86620	'13380	6'55
39	8318	79	'99047	'00953	27'60	76	1891	200	'89427	'10573	6'48
40	8239	71	'99144	'00856	26'95	77	1691	139	'91795	'08205	6'19
41	8168	73	'99102	'00898	26'18	78	1552	191	'87710	'12290	5'70
42	8095	76	'99060	'00940	25'42	79	1361	261	'80822	'19178	5'43
43	8019	88	'98902	'01098	24'65	80	1100	99	'90991	'09000	5'60
44	7931	86	'98910	'01090	23'92	81	1001	77	'92344	'07656	5'10
45	7845	94	'98805	'01195	23'18	82	924	130	'85882	'14118	4'49
46	7751	111	'98569	'01431	22'45	83	794	134	'81099	'16901	4'14
47	7640	129	'98306	'01604	21'77	84	660	56	'91489	'08511	3'88
48	7511	108	'98559	'01441	21'14	85	604	201	'66667	'33333	3'70
49	7403	116	'98439	'01561	20'44	86	493	67	'83333	'16667	3'54
50	7287	103	'98593	'01407	19'75	87	336	75	'77778	'22222	3'14
51	7184	131	'98172	'01828	19'03	88	261	...	'1'00000	'00000	2'90
52	7053	124	'98243	'01757	18'37	89	261	104	'60000	'40000	1'90
53	6929	122	'98246	'01754	17'69	90	157	...	'1'00000	'00000	1'83
54	6807	134	'98025	'01975	17'00	91	157	105	'33333	'66667	'83
55	6673	145	'97820	'02180	16'33	92	52	52	'00000	'1'00000	'50
56	6528	133	'97964	'02036	15'69						

The number of lives in the French Co. under 20 was not considered sufficient to furnish reliable results; and the ratio of 10,000 was adopted in preference to the actual numbers under obs., for the purpose of more ready comparison with the results of *Experience T. No. 2* (Inst. of Actuaries), to which, on the whole, it bears a very general resemblance. A detailed comparison shows that the French mort. is very much greater than the English for the 3 years 20-2; from 23 up to 42 the English mort. is more severe, so that out of equal numbers at age 20 there are living at 42, 8095 French and only 7959 English; from 43 up to 79 the French mort. far exceeds the English, so that at this last date there are only 1361 French surviving against 1625 English. Between that age and 90 the English experience the greater mort.: for at 91 there are only 117 English surviving against 157 French. At 92 all the French have died out; while 51 English remain, the last of whom does not die until 98, as may be seen by reference to *Experience T. No. 2*.

In some subsequent contributions to the *Journal des Actuaire Français* M. de Kertangy discusses the questions of the *effect of selection*; of the *duration of policies*; and other points of practical interest.

This is the first and only T. in France based upon the experience of insured lives, as distinct from annuitants. The *Journal des Assurances*, in reviewing the results of this T., expresses a hope to see the French cos. combine their experiences, so as to substitute, for the "defective T. of Duvillard," one which represents the true mort. amongst French insured lives. In this hope we also join.

1876.—There is now in preparation by M. Devink, under the authority of the Gov., a Mort. T. of the experience of the large body of life annuitants past and present in connexion with *La Caisse de Retraite*, of which enterprise we have already given an account under sub-heading *Annuitants*, in this article, date 1856. The necessity for the adoption of a new basis is seen in the comparative T. given under date 1860, in this section. The annuitants consist in the main of agriculturists, mechanics, operatives, miners, mariners, and railway servants; and on the whole it was not expected that their united mort.

experience would be more favourable than the assumptions in Deparcieux's T.; but it has turned out that this supposition was erroneous, and there is now an ann. deficit of several million fr. which the Gov. of France is called upon to make good.

When the new T. is completed, it is assumed that the annu. rates for new entrants will be based upon it, with prob. 4 p.c. interest—in which case the Gov. will most prob. be placed in disadvantageous competition with the ins. cos.

For convenience of reference and comparison we give the following T. of the "Expectations" shown by the different *French Mort. T.*

Age.	Deparcieux 1746.	Buffon 1749.	Montpellier 1795.		Duvillard 1806.	Demontferrand 1838.		Friendly Societies 1852.	Beau- visage 1867.	Co. Générale 1874.
			Males	Females		Males	Females			
0	...	8'00	23'37	27'35	28'76	38'33	40'83	...	...	...
1	...	33'00	31'80	34'51	36'35	45'16	46'66	...	...	...
2	...	38'00	36'14	38'43	40'43	47'25	49'00	...	...	...
3	47'67	40'00	39'18	41'71	42'44	47'80	49'50	...	55'02	...
4	48'08	41'00	41'67	44'61	43'26	48'08	49'75	...	54'57	...
5	48'25	41'50	43'95	46'86	43'40	48'33	49'75	...	54'01	...
6	48'17	42'00	45'05	47'88	43'16			...	53'29	...
7	47'00	42'25	45'46	48'08	42'70			...	52'56	...
8	47'67	41'50	45'36	47'85	42'12			...	51'76	...
9	47'33	40'83	44'81	47'41	41'48			...	50'97	...
10	46'83	40'16	44'12	46'77	40'80	47'00	47'42	...	50'17	...
11	46'25	39'50	43'33	46'06	40'12			...	49'41	...
12	45'67	38'75	42'52	45'31	39'43			...	48'62	...
13	44'92	38'08	41'70	44'55	38'74			...	47'85	...
14	44'17	37'41	40'87	43'79	38'07			...	47'08	...
15	43'50	36'75	40'06	43'02	37'40	43'58	43'60	...	46'33	...
16	42'83	36'00	39'26	42'27	36'75			...	45'55	...
17	42'17	35'33	38'49	41'52	36'1			...	44'81	...
18	41'50	34'66	37'79	40'81	35'48			...	44'10	...
19	40'83	34'00	37'14	40'12	34'87			...	43'45	...
20	40'25	33'41	36'52	39'45	34'26	40'00	40'08	...	42'83	41'87
21	39'58	32'91	35'92	38'80	33'66			41'83	42'23	41'19
22	39'00	32'33	35'31	38'16	33'07			41'21	41'63	40'54
23	38'42	31'83	34'71	37'54	32'49			40'55	41'02	39'97
24	37'75	31'25	34'10	36'92	31'91			39'88	40'39	39'26
25	37'17	30'75	33'49	36'32	31'34	37'25	36'83	39'19	39'76	38'52
26	36'58	30'16	32'88	35'71	30'77			38'49	39'10	37'64
27	35'92	29'58	32'27	35'11	30'20			37'77	38'44	36'81
28	35'33	29'00	31'66	34'52	29'64			37'08	37'78	36'06
29	34'67	28'50	31'05	33'93	29'08			36'38	37'11	35'17
30	34'08	28'00	30'43	33'34	28'52	34'00	33'41	35'69	36'41	34'49
31	33'42	27'50	29'82	32'75	27'96			35'01	35'68	33'84
32	32'83	26'91	29'19	32'17	27'40			34'32	34'96	33'11
33	32'17	26'25	28'57	31'59	26'84			33'63	34'23	32'33
34	31'50	25'58	27'94	31'00	26'28			32'93	33'48	31'54
35	30'92	25'00	27'30	30'41	25'72	30'50	30'00	32'22	32'73	30'75
36	30'25	24'41	26'66	29'82	25'16			31'49	31'99	29'98
37	29'58	23'83	26'01	29'23	24'59			30'76	31'24	29'23
38	28'92	23'25	25'36	28'64	24'03			29'99	30'48	28'50
39	28'17	22'66	24'71	28'05	23'46			29'24	29'71	27'69
40	27'50	22'08	24'06	27'45	22'89	27'00	26'58	28'44	28'95	26'95
41	26'75	21'50	23'40	26'86	22'32			27'63	28'18	26'18
42	26'08	20'91	22'77	26'26	21'76			26'82	27'42	25'42
43	25'33	20'33	22'16	25'66	21'19			26'04	26'64	24'65
44	24'58	19'75	21'58	25'05	20'62			25'27	25'87	23'92
45	23'92	19'25	21'00	24'44	20'05	23'41	23'16	24'56	25'10	23'18
46	23'17	18'75	20'44	23'83	19'48			23'88	24'42	22'45
47	22'42	18'16	19'88	23'21	18'91			23'22	23'63	21'77
48	21'75	17'66	19'33	22'59	18'13			22'57	22'91	21'14
49	21'08	17'16	18'78	21'97	17'79			21'93	22'20	20'44
50	20'42	16'58	18'23	21'35	17'23	19'91	19'58	21'29	21'49	19'75
51	19'75	16'00	17'68	20'74	16'68			20'63	20'78	19'03
52	19'08	15'50	17'14	20'14	16'13			19'96	20'07	18'37
53	18'50	15'00	16'60	19'55	15'58			19'28	19'37	17'69
54	17'83	14'50	16'06	18'98	15'04			18'58	18'68	17'00
55	17'25	14'00	15'53	18'42	14'51	16'50	16'25	17'87	17'98	16'33

Age.	Dèpar- temens 1746.	Bouffon 1749.	Montpellier 1795.		Duvil- lard 1806.	Demontferrand 1838.		Friendly Societies 1852.	Beau- visage 1867.	Co. Générale 1874.
			Males	Females		Males	Females			
56	16'67	13'41	15'02	17'86	13'98			17'15	17'29	15'69
57	16'00	12'83	14'54	17'32	13'46			16'43	16'61	15'00
58	15'42	12'25	14'06	16'78	12'95			15'70	15'97	14'31
59	14'83	11'66	13'60	16'25	12'45			14'98	15'29	13'76
60	14'25	11'08	13'14	15'73	11'95	13'25	13'16	14'30	14'60	12'95
61	13'67	10'50	12'70	15'22	11'47			13'64	13'97	12'41
62	13'00	10'00	12'27	14'71	10'99			12'99	13'36	11'99
63	12'42	9'50	11'84	14'21	10'53			12'35	12'75	11'51
64	11'83	9'00	11'42	13'71	10'07			11'72	12'15	10'86
65	11'25	8'50	11'01	13'22	9'63	10'58	10'50	11'12	11'57	10'31
66	10'67	8'00	10'60	12'74	9'20			10'54	11'01	9'96
67	10'08	7'50	10'20	12'25	8'77			9'99	10'50	9'49
68	9'58	7'00	9'80	11'76	8'36			9'47	9'95	8'95
69	9'08	6'58	9'40	11'28	7'97			8'99	9'44	8'45
70	8'67	6'16	9'02	10'79	7'58	8'08	8'08	8'59	8'93	8'07
71	8'17	5'66	8'63	10'32	7'21			8'17	8'44	7'48
72	7'75	5'33	8'23	9'84	6'85			7'73	7'98	7'14
73	7'33	5'00	7'84	9'37	6'51			7'31	7'54	6'73
74	6'92	4'75	7'46	8'90	6'18			6'90	7'12	6'57
75	6'50	4'50	7'07	8'44	5'87	6'16	6'16	6'50	6'72	6'55
76	6'08	4'25	6'69	7'98	5'57			6'10	6'35	6'48
77	5'75	4'08	6'30	7'53	5'29			5'71	5'98	6'19
78	5'33	3'91	5'93	7'07	5'04			5'36	5'65	5'70
79	5'00	3'75	5'56	6'62	4'80			5'00	5'32	5'43
80	4'67	3'58	5'17	6'17	4'60	4'75	4'75	4'69	5'00	5'60
81	4'42	3'43	4'80	5'73	4'42			4'39	4'70	5'10
82	4'08	3'25	4'44	5'30	4'29			4'12	4'41	4'49
83	3'83	3'16	4'06	4'88	4'19			3'84	4'14	4'14
84	3'50	3'08	3'69	4'47	4'15			3'52	3'90	3'88
85	3'17	3'00	3'33	4'08	4'16	3'83	3'75	3'21	3'69	3'19
86	2'92	...	2'97	3'72	4'21			2'92	3'48	3'54
87	2'67	...	2'61	3'38	4'28			2'67	3'27	3'14
88	2'33	...	2'29	3'09	4'28			2'36	3'06	2'90
89	2'00	...	2'00	2'89	4'07			2'06	2'85	1'90
90	1'75	...	1'80	2'74	3'87	3'16	3'16	1'77	2'70	1'83
91	1'50	...	1'71	2'49	3'67			1'50	2'57	'83
92	1'25	...	1'61	2'26	3'41			1'25	2'48	'50
93	1'00	...	1'41	2'04	3'28			1'00	2'34	...
94	0'00	...	1'17	1'83	3'10			...	2'24	...
95	...	...	0'83	1'61	2'92	2'16	2'16	...	2'14	...
96	...	...	0'50	1'38	2'74			...	2'09	...
97	...	...	...	1'05	2'57			...	1'99	...
98	...	...	...	'75	2'40			...	1'79	...
99	...	...	...	'50	2'24			...	1'74	...
100	...	...	...	...	2'08	1'33	1'33	...	1'67	...
101	...	...	...	...	1'93			...	1'65	...
102	...	...	...	...	1'78			...	1'37	...
103	...	...	...	...	1'65			...	1'25	...
104	...	...	...	...	1'51			...	1'00	...
105	...	...	...	...	1'39			...	'50	...

In *Duvillard's* T. the ages extend to 110 years, but as there is no other T. which extends to these advanced ages, we have not carried the figures beyond age 105.

Population.—In the introductory portion of this article we have given the general population returns of France over a considerable period. Under sub-heading *Vital Statistics* (sub-section *Population*), we propose to consider some of the causes which affect the progress of the pop. in France.

Provident Institutions (*Sociétés de Prévoyance*).—The provident habits of the French people may at first sight lead to the belief that the country would abound in provident asso. A more matured reflection will, however, lead to a recognition of the idea, that where all are thrifty, the necessity for such institutions is much less than when a contrary state of things exists.

A peculiar feature in France is that certain leading sos. of the provident class have operated not in affording any direct relief, but in the promotion of other asso. of a self-sustaining character. Thus the *Société Philanthropique*, one of the earliest, if not the

earliest, provident inst. of France, gave its attention to the development of friendly sos.—see sub-heading *F. Sos.* The *Banque Philanthropique*, founded 1833, undertook to advance the promotion of life ins. cos. and annu. sos. The following is but a brief outline of the inst. of this class.

1818.—Savings banks were estab. in France by Royal Decree this year. The Paris savings bank dates from this year. This was a limited liability co. The plan adopted—which did not allow for payment of interest to depositors—was not attended with success. In 1835 a new system was introduced, under the law of that year. (See 1835, 1872.)

1833.—The *Banque Philanthropique* was founded in Paris this year. It appears to have embraced amongst its various objects the advancement of the bus. of life ins. and annu. asso. We have not been able to trace any direct results from the operations of this inst.

1835.—By a law dated 5 June this year, the control of savings banks was vested in the Municipal Council; and it was ordered that their funds should be invested in Rentes, or entrusted to the State, in view of securing a return of interest to the depositors. (See 1818 and 1872.)

1850.—It was under the law of 18 June this year that the *Caisse de Retraite pour la Vieillesse* was estab. The first idea appears to have been a development of the savings bank system; but it ultimately (1856) merged into a scheme of survivorship annuities. Upon it appears to have been engrafted something of a scheme of State finance. We have already spoken of this organization under other heads.

1851.—M. de Watteville pub. his remarkable work on the Benevolent Institutions of France, regarding which we shall speak more particularly under general title HOSPITALS.

1852.—By a dictatorial decree of 26 March this year, the Gov. took under its more especial control the *Sociétés de Secours Mutuels* (*F. sos.*), and hence deprived them in some degree of their previous provident character—see sub-heading *Friendly Sos.*

1872.—The first savings bank estab. in France was that founded in Paris in 1818. Since then 521 savings banks in all have been sanctioned in France. These have 620 branches. The amount due to depositors on 31st Dec. this year, was £20,609,000, in 2,016,000 accounts, distributed as follows:

£20 and under	per cent. 79	£32 to £40	per cent. 5
£20 to £32	10	Over £40	6

The number of transactions in the year 1872 was 2,558,000.

The interest allowed by the Gov. is 4 p.c.; that paid to the depositors in Paris 3½; on the average of all the banks 3¾ p.c.

The general and municipal councils assist the banks by donations of about £3,000,000 a year. The Bank of Paris alone has 241,000 depositors. The average of deposit accounts to pop. is 56 per 1000, which rises in the department of Seine-et-Marne to 161, and sinks in that of Corsica to 5 per 1000. The average of investments is a little over £5, which rises in the Basses-Alpes to nearly £9, and sinks in the department of the Seine to under £3.

The average repayment was nearly £10, rising in the Charente to nearly £12, and sinking in the Vosges to a little over £6. The deposits in the Paris savings bank amount to £1,418,000. The savings banks were greatly affected by the events of 1870 and 1871, which caused very large withdrawals. Savings bank deposits contributed £2,503,000 to the loan of 2 milliards. The majority both of deposits and withdrawals take place in January.

The savings bank of Paris has 32 branches. Of the depositors in 1874, 63 p.c. were workmen and artisans, 18 p.c. domestic servants, 10 p.c. employés, 3 p.c. soldiers and sailors, 2 p.c. belonged to the liberal professions, and 4 p.c. were annuitants. By a legacy of M. Lavocab, the bank has created 1256 deposits of £2 each for children between 10 and 15 years.

A statement in the *Journal Officiel* for 12 December, 1876, enables us to bring the particulars of savings banks in France to the end of 1874, when there were 529 banks and 694 branches. The number of deposit accounts had increased to 2,170,000; the new depositors for the year being 263,000, divided as follows:

82,000 workmen	£646,000	60,000 children	£239,000
38,000 domestics	345,000	Add for Friendly Sos.	5,000
12,000 employés	83,000		
7,000 soldiers and sailors.....	53,000		
64,000 other professions.....	637,000		
		263,000	£1,908,000

The expenses of the banks were 10d. p. deposit account, or ½ p.c. on the transactions of the year. The donation funds were £674,000, the reserve funds £95,000.—*Vide paper by Mr. E. W. Brabrook, F.S.A., read before Statistical So. of London, May, 1877.*

1875.—The growth in the provident habits of the people is further confirmed by reference to the number of holders of *Rentes*,—the “Consols” of France—and the aggregate amount of such holdings at different periods during the present century; as shown in the following T.:

Years. Jan. 1.	No. of holders of Rentes.	Amount of Ann. Rente.	Years. Jan. 1.	No. of holders of Rentes.	Amount of Ann. Rente.
		<i>Francs.</i>			<i>Francs.</i>
1798	24,791	25,111,785	1870	1,254,040	358,087,510
1810	145,663	56,730,583	1871	1,269,739	368,222,343
1820	199,697	172,784,838	1872	2,147,130	502,126,256
1830	195,370	204,696,459	1873	3,473,475	626,120,206
1840	265,447	195,911,137	1874	4,130,040	690,013,493
1850	846,330	229,608,758	1875	4,380,933	748,404,971
1860	1,073,801	338,356,589			

This rapid increase in the number of fund-holders is remarkable ; but they do not yet reach the number of land-owners (5½ millions).

At the commencement of 1875, the total public debt of France averaged 515 fr., or £20 12s. p. capita of the pop.: while the burden of int., or *rente*, was 19 fr., or 15s. 10d. p. head.—*Vide* Martin's *Statesman's Year-book*.

1876.—A few years since another and important kind of provident inst. was introduced into France, viz. *School Savings Banks*. Their rapid growth is remarkable. In February of this year there were 1300 of these estab., and on the 31st Dec. there were 3200, with 230,000 depositors, their extension in country districts being more particularly marked. This inst. induces in the minds of young people habits of order, economy, and foresight. The working of the school funds is of the most simple description ; the children set apart a portion of the small sums given to them by their parents and hand it to the teachers, who receive even the smallest amounts and inscribe them in a register with a check margin. Each juvenile depositor therefore has an account open, and as a voucher a sheet showing the amount of the various sums paid in. When the total of successive deposits reaches a franc, the teacher hands over the sum to the savings bank, and procures a pass-book for the child. After this is delivered, the teacher continues to receive the diminutive contributions until they amount, in each individual case, to a franc, when the sum is once more transferred to the parent estab., and so the process is repeated. The school funds also favour the savings banks by the propaganda of the children in their families.

Regulations for the Founding and Management of Ins. Asso.—Formerly no ins. co., for whatever branch of bus. intended, could be estab. in France without the express sanction of the Sovereign—as was also the case in Eng. But under more recent laws considerable modifications have taken place in this regard. Yet even now no life ins. asso.—and under this general designation we believe *annu.* and *tontine* asso. are included—can be founded without special authorization.

We propose to pass under review, as briefly as may be, the progress of the changes referred to.

1787.—A Royal Decree issued this year, and which we have already cited in regard to its main provisions under sub-heading *Life Ins.*, laid down certain regulations in regard more particularly to life ins. asso., which have never been very much relaxed. The system embodied is one of strict inspection and control. All the following provisions are required to be embodied in the stat. of life cos. when they are submitted to the Ministère du Commerce, before sending it to the Conseil d'Etat. The latter examine every clause, either in the relations of the members to each other, or of the manager to the members. Thus—

1. The subscriptions must be *bond fide*.
2. To prevent the heavy cost to a small number of individuals, no class, series, or so. to be formed with less than 10 members, who must join it within a year ; if not, the subs. to be void.
3. Estimates of T. which are required, with the Mort. T. on which the calculations are based, the mean rate of int. If approved of, the stat. contain the description of the T. to be used, and also the rates, annexed.
4. In case of the non-payment of the subscribed cap. at the period fixed, the fine to be imposed for the delay, depending on the mort. and an increased int., with the time allowed for payment, must be stated.
5. The man. must not speculate on the lives of a *series*, or in the purchases or sales of *annu.*, except as a subscriber like the rest.
6. Various checks are placed on the man. He must give security in a minimum *annu.* of 5000 fr. (£200) of 3 p.c. *annu.*—the title of which is deposited at the *Caisse des Dépôts et Consignations*—in order to answer for the portion of expenses to be returned if the so. should be dissolved before the time agreed upon. The security is progressive, increasing from £40 p.a. 3 p. cent. for every £8000 of *ann. deposits*, up to £1000 p.a. 3 p.c.—equal to £30,000 of cap. nearly.
7. The man. must convert into Gov. Funds all the subs. paid to him, within 5 days from their receipt.
8. A commission, composed of 5 members, is appointed by the Gov. to superintend the

operation of the laws. They meet once a week at the Ministère du Commerce, and make a weekly report, wherein they declare, beside their general remarks on the progress of the asso., they have examined the sums paid by the subs., and have assured themselves of the conversion of the said funds into Gov. annu., by the examination of receipts, etc.; and that they have verified the pol. granted, and ascertained that they were conformable to the stat. of the asso.

9. The subs. must not be invested in the name of the man., but in the name of the asso., of the particular class or series for whom they were paid. At the period of distribution the Gov. Funds thus acquired are to be realized, but sub-divided into portions of the same annu. to the surviving members, by a decree for distribution obtained by the *Conseil de Surveillance* jointly with a subscriber of each class. It is only after this that the different portions allotted to each member become saleable; so that no large sum can be abstracted by any of the officers.

10. The interest payable to the asso. is paid on the receipt of the man. and one of the members of the *Conseil de Surveillance*, and must be invested within the same period, and in the same manner as the subs.

11. The *Conseil de Surveillance* is chosen from the members of each class, series, or asso.; and the members of it are consequently interested in seeing that all the proper formalities are complied with. They have the same powers as the Gov. Commissioners. The securities are deposited by them in a box, with 2 keys, of which the man. keeps one, and one of the members of the council the other.

It is clear that these regulations were shaped in view of the formation of Tontine annu. asso. rather than of life ins. asso., as understood in this country; and indeed there can be no doubt that all the earlier so-called life ins. asso. in France were either Tontine annu. or Tontine endowment projects. See sub-divisions *Annuities*; *Life Ins.*

1804.—By the *Code Napoléon* [now *Code of France*] of this year, the general principles of all partnerships, whether civil or commercial, are prescribed. The details of commercial asso. are left to be from time to time settled by the *Code de Commerce*.

1852.—Under an Imperial Decree prescribing Regulations of Public Administration for the constitution of accident ins. cos., dated 26 March this year, all F. sos. could obtain "collective" ins. for their members up to 1000 frs. (£40) upon each life. See sub-heading *Accident Ins.*

1867.—By the law of 24 July this year it is declared that asso. in the nature of *Tontines* and *Life assu. asso.*, whether mut. or proprietary, "remain subject to the authority and supervision of the Gov." It orders that these, whether mut. or prop., shall be subject to the authorization and surveillance of the Gov. That surveillance is to bear principally upon the mode of formation and the amount of the reserves for each category of assurance; upon the bonuses distributed; upon the values given to the items composing the assets of the so.; upon the manner in which the statutes of the so., as well as the policy conditions, are carried out. Other insurance associations might be formed without special authorization, under Regulations of Public Administration for the time being. An outline of the regulations brought into force by this act has already been given in the preliminary portion of this art. Sub-heading *Laws relating to Ins. Asso.*

1868.—Under an "Imperial Decree prescribing Regulations of Public Administration for the Constitution of Assu. Sos." [asso.], dated 22 January, a series of regulations for the foundation and gov. of ins. asso. (other than *Tontines* and *Life ins. asso.*) were promulgated. An outline of these we now proceed to furnish under their appropriate headings. Those relating to the actual creation of the asso. appear under sub-sections *Commencement of Business*; *Registration*.

Under another Decree of 11 July this year, a scheme of Gov. ins. was authorized, which we have already spoken of under sub-heading *Gov. Ins.*

Accounts.—The general law applying to insurance, in common with other joint-stock cos., requires that there be drawn up half-yearly a summary account of the position, assets, and liabilities of the undertaking, and that there be drawn up every year, in conformity with the *Code de Commerce*, an inventory containing a statement of the property, real and personal, and of all the debts of the co. due or owing. This inventory, the bal.-sheet, and the profit and loss account are to be at the disposal of the Commissioners (a species of audit committee—*Censors*) appointed at the preceding gen. meeting, for at least 40 days before the approaching gen. meeting.

The special insurance law of 1867 requires that a quarterly summary of the condition of the asso. be prepared "for the benefit of shareholders." (See *Misrepresentations*; *Penalties*.)

Capital and Shares.—Previous to the law of 1867, no *Société Anonyme* could have a cap. larger than £800,000; as to its minimum amount there was no will but that of the sovereign.

Under the law of 1867, where the whole cap. of the co. does not exceed 200,000 frs. (£8000), the shares must not be less than 100 fr. (£4) each. Where the cap. exceeds this sum, the shares must not be less than 500 fr. (£20). There is no limit to the amount of cap.

In no case must the amount of cap. paid up be less than 50,000 frs. (£2000). The liability of shareholders is limited to the amount of their shares. See *Penalties*; *Warrants*.

Censors (Inspecteurs).—A gen. meeting of the *commanditaires* (shareholders) must be convened before the estab. of the bus.; and it is the duty of this meeting to appoint a committee of surveillance or inspection, whose duty it is to ascertain that all the required preliminaries have been performed, and to watch over the interests of the *commanditaires* by an ann. audit of the accounts of the asso.

The approval is required of the Inspecteurs to the declaration of dividends.

Commencement of Business.—A co. has no legal status until the whole of the cap. is subscribed, and each of the shareholders has paid up *one-fourth* of the amount of his shares.

A declaration before a notary stating that this and other necessary preliminary conditions have been fulfilled (see *Formation of Ins. Asso.*) must be made by the managers, and a list of the shareholders filed. See also *Registration, Penalties.*

Contract of Ins.—The Code now requires not only that the contract shall be in writing, but that it shall bear the date of the day of subscription, expressing whether before or after noon, with sundry other particulars; and especially that no blank spaces be left in the pol.

Directors (Administrateurs). See *Management.*

General Meetings.—A general meeting is one of the preliminary requisites in founding a public co. in *France*. To be valid it must be attended (personally or by proxy) by *one-fourth* of the members entitled to take part in the proceedings. The *first* general meeting at which officers are to be appointed should be attended by one-half of the members. The same as to general meetings for altering the regulations.

The *Censors* are to be appointed at the first gen. meeting. [*Censors; Management.*]

Investments.—Funds beyond those required for current use to be invested in "State Rentes, Treasury Bonds, or other securities guar. by the State; shares of the Bank of France; obligations of the departments and civic corporations; of the Credit Foncier of France; or Railways which have a minimum of interest guaranteed by the State." (Art. 5.)

Litigation.—Commercial disputes in France, including all litigation arising out of relations of partners towards each other, and the public—and hence all disputes regarding *Pol. of Ins.*—come within the jurisdiction of the Tribunal of Commerce of the district in which the dispute arises. These tribunals are composed of 3 judges selected by the trading community from amongst their own number, and every person who has exercised a trade for 5 years, and has attained the age of 30 years, is eligible for the post. Such a tribunal exists in every town of any importance; and in places where there is none, the local judge associates with himself commercial assessors to constitute a tribunal when the occasion arises. [*POLICIES OF INS. COURT.*]

Management.—The management may be confided to a board of directors, whose powers are to be defined by the statutes of the co.; or if permitted by the stat. they may appoint a man. from outside the co., the directors being responsible to the co. for his acts, or the management may be by a man. appointed at a gen. meeting and assisted by a board of directors. The statutes to determine the respective powers of each.

The *directors* must deposit with the co. a certain number of fully paid-up shares (regulated by the art.) as a guarantee of good faith.

Individual shareholders have a right of action against directors, and also against *censors*, in the event of mismanagement; and shareholders representing one-twentieth of the whole cap. may bring action on behalf of themselves, and the other members. (See *Misrepresentation*: also *Penalties.*)

The statutes of French companies usually contain great elaboration of detail as to management.

Misrepresentation.—The penalty of imprisonment for 1 year up to 5, according to circumstances, is imposed on those who have obtained or attempted to obtain subscriptions or payments for shares, by falsely stating that similar subs. and payments have been already made. The same punishment is imposed on persons who falsely pub. names as supporting the co., that had not in fact any connexion with it. The same on directors who by the suppression of balance-sheets, or by means of fraudulent balance-sheets, have caused fictitious dividends to be declared.

Penalties.—Special penal clauses are introduced into the law of 1867, which operate as regards ins. asso. in add. to the gen. law against frauds. A fine varying from £20 to £400 is imposed on the issue of shares under the legal value (see *Capital and Shares*). The same penalty for the formal issue of shares where the capital has not been fully subscribed; where a quarter of the cap. has not been paid up; or where business has been commenced before the notarial declaration has been made (see *Commencement of Business*); or where persons have created a fictitious majority at a general meeting by representing themselves as proprietors of shares not really belonging to them. (See *Misrepresentation.*)

Registration.—Every commercial asso. founded in *France* must in the course of the first month from its constitution deposit at the office of the local judge, and of the Tribunal of Commerce of the District, an authentic copy of the articles of partnership or asso.; and to this must be added, in the case of cos., a copy of the notarial declaration, and a copy of the minutes of the first gen. meeting.

In the case of a *so anon.* there must be added, a *certified list of the shareholders*, with their names, addresses, and the number of shares held by each. Within the same time there must be pub. in one of the local journals appointed by the Gov. to receive such adv. certain extracts of the documents named. The extracts must comprise the name of the asso., and its form; its place of bus.; its commercial object; the amount proposed to be deducted from its profits for the purpose of forming a reserved fund [*Reserved Fund*]. If the bus. is to be carried on at various places, it seems that these requirements have to be complied with in each place. (See *Commencement of Bus.*; *General Meetings*.)

Reserved Fund.—Each year at least 20 p.c. of the net profit must be applied to the formation of a reserved fund until such fund amount to $\frac{1}{3}$ th of the cap., after which it becomes optional.

Warrants (Actives au porteur).—Shares can be converted into warrants when half their amount has been paid up, provided the reserved fund is equal to the part of the cap. not paid up. The orig. subscribers remain liable for two years after transfer.

Winding up.—In case of loss of $\frac{1}{3}$ th of cap., the directors are bound to call a gen. meeting to decide whether the co. shall be wound up. In case such meeting is not called, any person, on proving an interest, can claim to have the co. dissolved with the assistance of the Tribunal of Commerce.

The winding up of a co. is conducted by liquidators, who have similar powers to those conferred by the English Joint-Stock Cos. laws.

The facilities offered by this new law do not appear to have lent much encouragement to the estab. of ins. asso. in France. Its requirements are indeed very onerous. M. Ponnaz, the founder of the *Héros*, and M. Porter of the *Europe Maritime*, have each been condemned to 7 years' imprisonment for having inscribed fictitious subscriptions, and commenced bus. without having fulfilled the required conditions.

As the charters of the old cos. (other than life) run out—as they all do under the French law—they will prob. reconstitute under this new law. The *Union* (orig. estab. 1828) has already taken this step.

Special Authorization.—In regard to Tontine and life ins. cos., requiring special authorization, the processes to be observed in the founding are of a different character from those herein set forth. We believe the following will be found to contain a full enumeration of the legal requirements to be observed:

1. The subscribers to the co. address a demand to the Prefect of the Department, and to the Prefect of Police if they reside in *Paris*. The petitions must be signed by all the stockholders or by their delegates. The proposed charter of the asso. must be annexed to the petition, together with the *statutes*, i.e. art. of asso. and regulations.

2. The art. of asso. (*statutes*) must explain the nature of the intended bus. of the co., the location, the term of its existence [authorization is only granted for a fixed term of years]; the amount of its cap.; the manner in which the co. is formed [its legal constitution]; if the stock be transmissible [transferable] or not; the period of time in which the cap. is to be realized [called up]; and the mode of administration.

3. The Prefect of the Depart., or the Prefect of Police in *Paris*, sends the petition, with annexed documents, to the Minister of the Interior and his counsel, who inquire into the following points: (a) That the asso. is not contrary to law, to good morals, to commercial usages, etc. (b) That the qualifications and the moral standing of the subscribers and their co-associates and administrators [directors] are such as to offer proper guarantees. (c) That the subscribers are able to realize at the commencement of bus. the amount of cap. intended to be called up [i.e. if the subscription be *bonâ fide*]. (d) If the interests of each subscriber are equitably and properly protected.

When these conditions are all reported as fulfilled, the Gov. grants the co. the authorization asked for, and empowers it to commence operations. *Prior to this, however, the proposed charter of the co. must have been posted up 3 months in the Hall of the Tribunal of Commerce.* And the one-fourth of the cap. paid up was required to be deposited in the *Caisse des Dépôts et Consignations*.

Proposed *life ins. cos.* must, in add. to the above, submit to the Council of State the statutes and tariffs [prems.] on which their operations are based. The cap. of these cos. cannot be alienated [i.e. the shares are not transferable]; and the stat. and by-laws of the co. must provide, in advance, for the investment of the money resulting from the prems. [i.e. it must be determined in what securities the life fund shall be invested].

Most of the existing ins. asso. in France were founded under regulations such as these; and those transacting *life* and *Tontine annu.* bus. will continue thereunder even when their present charters expire.

Operation of the preceding Laws.—The *so. anon.* of France appear from the preceding review to be asso. of *capital* rather than *persons*. They are framed with the view of building up and sustaining a permanent cap. to be applied for an agreed purpose. The managers are *mandatories*, binding by their acts not the persons but the money of the asso.; and are held strictly responsible for their trust. This law has on the whole worked well.

One effect of the stringent regulations in force here has been to induce the formation in

England and elsewhere of asso. designed to trade in France. This part of the subject has been already reviewed under FOREIGN INS. ASSO. IN FRANCE.

Re-insurance Cos.—In France it has now for some time been the practice to found ins. cos. whose sole and especial bus. it is to re-insure the surplus risks of other cos. This is more especially the case in regard to *fire ins.*, where the cos. are frequently compelled to take very large lines. These re-ins. cos. prevent the necessity of the fire offices having re-insurance contracts with each other, as is customary in the U.K. The nature of the bus. renders such arrangements very undesirable in France.

It may be mentioned that under the Marine Ins. Ordin. of France (already fully quoted), the insurers and the insured were alike permitted to resort to re-insurance (sec. 20). [RE-INSURANCE.] In 1869 there was founded in Paris the *Cie. Spécial d'Assurance et de Ré-assurances Maritimes*.

The two following *French* cos. are now carrying on fire re-insurance in Paris. Their financial position in 1874 has been stated under sub-heading *F. Ins., Hist. and Statistics of*.

1862.—*La Ré-assurance*. Cap. 5,000,000 fr. (£200,000).

1863.—*Caisse Générale des Ré-assurances et de Co-assurances contre Risques d'Incendie*. Cap. 5,000,000 fr.

Formerly the re-ins. contracts (beyond those with re-insurance cos.) were made principally with *German* and *Italian* cos.; now they are made chiefly with Brit. offices.

The following are the foreign ins. cos. carrying on the bus. of F. ins. in Paris, arranged in the order of their nationalities:

AMERICAN.—The *Home* of New York.

AUSTRIAN.—*Assurances Générales de Trieste et Venise*; *Securitas*, of Vienna.

BRITISH.—*North British and Mercantile*; *Commercial Union*; *Queen*; *Lancashire*; *Northern*; *Manchester*; *London and Lancashire*; *Scottish Commercial*; *Scottish Imperial*; *London and Southwark*; *Britannia*; *Staffordshire*; *Belfast*; *Standard*.

GERMAN.—*Magdeburger*.

ITALIAN.—*La Nazione*; *L'Italiana di Torino*.

ROMANIAN.—*Dacia*; *Romania*.

SWISS.—*Bâloise*; *Ré-assurance de Genève*.

The principles which govern the bus. of fire re-insurance in France are much the same as prevail in England. They are usually embodied in the treaties between the parties to a contract, and are as follows:

1. The re-ins. premis shall be exactly the same as those of the direct pol. 2. The direct co. shall retain on the risk insured a sum equal to that given to the re-ins. co. 3. The accounts to be settled every 3 or 6 months, as may be agreed. 4. The losses below 2000 or 3000 fr. are generally included in accounts, *i.e.* they are not claimed immediately, but are treated as a deduction from the current prem. account. 5. The larger losses are to be paid by the re-ins. co. as soon as the direct co. has paid. 6. All differences to be adjudicated upon by arbitrators, and not by the Common Law Courts.

The mode of conducting the bus. now is that the risks offered are entered in a book (*cartel*), and the signature by the agent of the re-ins. co. denotes acceptance of the risk.

The commission paid by the re-ins. cos. is usually 25 p.c.

Mr. G. W. Kilford is regarded as the great authority in regard to fire re-insurance in France.

Statistics (General).—There are few countries in Europe wherein more elaborate statistical returns are prepared by the Gov. Departments than in France. It may be useful to give a brief outline of these several Departments.

1834.—A Depart. of Gen. Statistics was estab. in connexion with the Ministry of Commerce, and placed under the direction of M. Moreau de Jonnés. A number of useful vols. (13 in all) were pub. by him on different subjects, including Pop., Finance, Commerce, Agriculture, Manufactures. These were pub. under the title of *Annuaire pour l'an 18*.

1852.—M. Legoyt succeeded M. Jonnés, and soon perceived (to use his own words) that too much was required of the provincial authorities, who had neither time, talent, nor knowledge sufficient for many of the researches they were called upon to make. He proposed therefore to associate private individuals with the Gov., in view of securing greater efficiency in the subjects investigated.

1853.—By decree of 1st Jan. this year the new system was estab. Under it a Statistical Committee was formed in every Canton, the names of its members being submitted by the Prefect. This Committee was subdivided into Communal Sub-Committees. To these sub-committees schedules of inquiries regarding agriculture and manufacturing industries are forwarded. The information obtained is first submitted to the Central Commission of the Arrondissement, or to the Chamber of Agriculture. The more completed returns are next forwarded to the Prefect by these local bodies, and finally transmitted by him either in bulk or in abstract to the Minister of the Interior.

In addition to the General Statistical Department, each of the Departments of Gov. publishes ann. or more frequent rep. with documents relating to its own branch of bus. Some ministries have special Statistical Departments attached. The Minister of Justice pub. the Criminal Statistics, which were at one period confided to M. Arondeau, who

was justly regarded as an eminent authority on all matters falling within his range. The Ministry of Finance possesses a department for Custom House statistics. Still further, numerous Commissioners are appointed with a view to inquiring into the working of institutions and associations; and the reports of these Commissioners are issued in almost bewildering profusion. Yet many of these reports are of great value.—See sub-section *Vital Statistics*.

1860.—M. Maurice Block pub.: *Statistique de la France comparée avec les autres états de l'Europe*, in which will be found much information of great value regarding the Vital Statistics of France.

Tontine Associations.—We have already dealt with the early hist. of Tontines in France, as a necessary introduction to the hist. of *Annu. on Lives*. We have but little to add. The Tontine feature has always offered an immense attraction in France; and there is unquestionably much to be said in its favour. The whole subject will be examined in detail under the general title TONTINES.

It is important to mention that while the *Tontine Lafarge* is usually spoken of as having ended in disaster, this must be only accepted in a limited sense; for under sub-heading *Mort. Tables* we have been enabled to give an important T. founded upon the experience of its members.

We have seen [*Regulations for the Founding and Man. of Ins. Asso.*] that Tontine asso. are exempted from the operation of the general Commercial Laws of France; and that they can only be organized by special authorization of the Gov. The reason assigned for this exemption in France is a remarkable one. It is to this effect: The *Tontine* contract is one by which the parties agree that the cap. subs. shall be divided among the survivors of them at some future date; and this division is the sole operation for which the asso. is founded. It amounts, therefore, to a *gambling transaction, based upon the uncertainty of human life*, and so does not come within the scope of purely commercial legislation!

Vital Statistics.—In this section of our subject we propose to bring together a large amount of condensed information falling within the range of this suggestive title. We arrange our facts into sub-sections for convenience of reference.

Army.—The drain occasioned by a large standing army upon the V. Statis. of a country is very considerable, and presents itself under many aspects. There is the direct loss of labour upon the manufacturing industries of the country; and a corresponding add. to the unproductive class of the community. The progress of the pop. is interfered with; and other evils arise which will be detailed in the following summary.

1859.—The army on the 1st June this year consisted of—

Present under arms (classes previous to 1857)	428,600
Men on renewable furlough	133,800
Present under arms (class of 1857)	60,000
Volunteers	50,000

Total 672,400

1875.—The army consisted of 430,703 men, made up as follows: Commissioned officers 19,057; non-commissioned officers 102,138; rank and file 309,508. Of the men engaged in the war navy we find no return.

Bills of Mortality.—The first B. of Mort. issued in France, of which we have any knowledge, was pub. in *Paris* in 1670. [PARIS.]

Births.—The regis. of births in *France* appears to have been very complete for many generations. We believe this is frequently the case in Roman Catholic countries, where the rites of baptism are performed at a very early period after birth. The requirements of the conscription have prob. caused add. attention to be paid to this matter.

We propose to place on record here certain facts of interest in regard to births. Their bearing in regard to pop. will be discussed more fully under sub-section *Population*, in this division of our subject.

In our general art. BIRTHS will be found many facts of interest regarding *France*.

1802.—M. Le Comte Laplace pub. in *Paris: Théorie Analytique des Probabilités*, wherein is contained a statement of the births in 30 Departments of France selected for the purpose during the 3 years ending 1802, distinguishing the sexes. Thus there were 110,312 male *births* to 105,287 of *females*, giving the proportion of male births to each 10,000 female births as 10,477. These statistics had been compiled by order of the French Gov., at the solicitation of M. Laplace. The figures have been quoted by M. Jacques Peuchet, in his *Statistique Elémentaire de la France*, pub. 1805.

1838.—Demontferrand's Mort. T. pub. at this date showed a higher mort. for infants under 2 years of age in *France* than was found to prevail in *England*. Further investigation has confirmed this view. See sub-section *Infant Mort.*

1854.—Still-born [*mort-nés*, or dead-born] children are not included among the births, nor among the deaths as ordinarily enumerated. They form a class apart. This has been so since about 1840. In 1854 the *mort-nés* in France numbered 39,778; in 1874 they reached 44,613. Prior to 1840 they were registered among the deaths, but not

among the births. The English Reg.-Gen. in his 6th Rep. (p. 467) expresses approval of "this judicious arrangement [of separate enumeration], which should be adopted in the rest of Europe." "The return of still-born children is no doubt below the truth; but it is an 'indication' of those that have attained the 7th, 8th, or 9th month. The rest escape observation." [See sub-heading *Mort. T.* 1870.]

1868.—A Rep. by M. Husson, a well-known authority, made at this date, contained the following statement: Formerly the average was 5 children for each marriage. At the commencement of the present century there were more than four (4·30) for each legitimate union. *Now*, it is the utmost if there are 3 throughout all France; and in *Paris* the average is only 2.—*Lancet*, vol. ii. p. 528. (See 1873.)

Under this date in our general art. BIRTHS will be found some valuable statistics in regard to *France*.

1869.—The proportion of children born ann. to 100 wives of ages 15–55 in *France* between the years 1863–9 was 15. The English Census Commissioners 1871 made the following comparison [vol. iv. p. xvi. of Census Rep.]

Country.	Years.	Ages 15–55.		Ages 20–40.	
		Legitimate Births to 100 married women.	Illegitimate Births to 100 unmarried women.	Legitimate Births to 100 married women.	Illegitimate Births to 100 unmarried women.
Eng. & W. France	1861–70	22·35	1·64	35·87	3·34
	1863–69	15·10	1·62	26·39	3·33

Thus at the French rate the English wives would have borne ann. in 1861–70 only, 475,948 children, whereas their lawful children actually registered 704,309. But 475,948 births would not have replaced the 479,450 ann. English deaths in the period: so the pop., without any emigration, would have declined. "In *France* more women marry than in Eng., and though they have fewer children to a family, the population is not sensibly declining."

1872.—Dr. E. Decaisne, in a note communicated to the Paris Academy of Science, shows that from the triple point of view of the fecundity of marriages, of the absolute number of births, and of the excess of births over deaths, France occupies the lowest place of all the European States. In *Prussia* 100 marriages give 460 children; in *France* the same number of marriages give only 300. In *Prussia* the number of births for each 100 of the pop. generally is 3·98 p.a.; in *France* there are only 2·55. In *Prussia* the excess of births over deaths in each million of the pop. is 13,000 p.a., while in *France* it only amounts to 2400. "If we admit," says Dr. Decaisne, "as a conclusion from the above figures, that the doubling of the pop. of *France*, despoiled of two of its finest provinces, and by unheard-of disasters, will require 170 years to be effected, while that of *Prussia* requires only 42 years, *Gr. Britain* 52, and *Russia* 66, some estimate may be made of the amount of the evil that has befallen this country."

The Reg.-Gen. for Eng. in his Rep. for 1873 said, "There are on an average but 319 children born in wedlock in *France* to 100 marriages: whereas in England the proportional number is 406."

1873.—Further investigation into the birth-rate in *France* showed it to have been as follows at different periods. In 1827, 3·11 p. 100 of the pop. In 1868, 2·62. In 1869, 2·57. In 1871, 2·26; 1872, 2·67; 1873, 2·61—a lower birth-rate than that of any other country in Europe.

1874.—The births of this year consisted of 884,358 legitimate, and of 69,294 illegitimate—the latter being 7·46 p.c. of the whole. In the capital, represented by the Department of the Seine, the proportion of illegitimate children this same year was 25·21 p.c.—or more than one-fourth of the whole.

There has been a gradual change in the proportion of male to female children born in France. Previous to 1840 the proportion was 106 males to 100 females. Since the latter date the male preponderance has been gradually declining. In 1874 it had fallen to 105·2 for the whole of France; and in *Paris* to 102·4 for all births, and for illegitimate births to 100·2. [BIRTHS.] [ILLEGITIMATE BIRTHS.]

1877.—A paper pub. in the *Journ. of the Statistical So. of Paris*, by M. Leon Vacher, treats of the relative fertility of marriages in *France*, *England*, and *Germany*, and shows that among 1000 married women in France between the ages of 15 and 50 years, there are 173 ann. births; in England, 268; and in Germany, 275. This author says the fertility of marriages in France shows a continuous and progressive diminution; and he explains this in relation to the increasing sub-division of real property in France. He in fact endeavours to reduce the whole question to a simple statistical study. If this view be a correct one, it has a bearing upon other countries also.

Census.—The Census of France is taken every 5th year in the month of Jan. But corrections, inquiries, and supplementary returns, frequently protract its completion for several months. Strangers are not included in the census until their domicile is fixed in France with a certain degree of stability.

1801.—The first census of the French people was taken this year; the next in 1806.

1821.—The census was resumed; none having been taken since 1806.

1836.—Much add. information regarding the condition of the people was obtained at the census this year. Their *ages* were for the first time demanded—an important element; with detailed inquiries regarding the domestic condition, as to marriage or celibacy, trade or occupation; whether deaf, dumb, blind, idiotic, or insane; whether native or foreign.

1851.—The ages of the people were for the first time incorporated in the rep. of the census.—See sub-section *Pop.* 1853.

1871.—The census of this year was omitted in consequence of the German invasion. It was taken in 1872.

The *Annuaire du Bureau des Longitudes* contains much information regarding the pop.

—See *Vital Statistics*, sub-section *Pop.*

Climate.—In the introduction to this art. we have spoken of the climate of France.

In 1875 there was pub. in Paris: *Influence de la Pression de l'Air sur la Vie de l'Homme; Climats d'Altitude et Climats de Montagne*. Par Dourdanet, Docteur en médecine; Chevalier de la Legion d'Honneur. 2 vols. A very valuable work, in which will be found the latest facts and obs. on the subject.

Deaths.—Registers of Deaths are understood to have been kept from an early period in France. We have no exact information upon the subject. A Bill of Mort. was first pub. in Paris in 1670.

In our art. DEATH-RATES will be found various details regarding deaths in France.

1829.—The *Edinburgh Review*, in an art.: *Proposals for an Improved Census of the Pop.*, offered the following remarks by way of comparison of the mort. of England and France (Mar. p. 22):

The ratio of mort. throughout the Continent has been very greatly diminished since 1770, though not, speaking generally, so much as in Eng. According to the estimate of Necker, who had the best means of acquiring accurate information, the rate of mort. in France in 1780 was as 1 to 304; whereas according to the official statements in the *Annuaire du Bureau des Longitudes*, for 1829 (p. 104), it is now 1 to 398. During the earlier part of the last century, *London* seems to have been on the whole less healthy than *Paris*, notwithstanding the inferior management of the hospitals of the latter, and the large proportion of the pop. that die in them. But though *Paris* has gained very greatly since the Revolution, and particularly during the present century, the balance has been turned against her, and she is not now so healthy as *London*. The mort. in Paris in 1817 and 1818 is estimated to have been in the ratio of 1 in 334. The pop. in Paris in 1827 was ascertained to amount to 890,431; and, as the deaths during the same year amounted to 23,533, the mort. was equal to 1 in 37'8. But it is estimated that at least 2000 deaths, consisting partly of foundlings [FOUNDLING HOSPITALS] sent to be nursed in the adjacent districts, take place in the country, that really belong to Paris; and taking these into account the mort. in 1827 would be 1 in 34'8. It should also be observed that the mort. in 1827 seems to have been rather below the average: so that the medium rate of mort. in Paris at present may prob. be estimated at 1 in 334 or 34.

1838.—M. de Montferrand completed this year an extensive series of obs. into the mort. of France, and upon these founded a Mort. T.—or, perhaps more correctly, corrected the results of *Duvillard's T.* We have given an outline of his labours under DEMONTFERRAND.

1853.—The following T. shows the mort. of France and Eng. and Wales in juxtaposition, for different ages at two periods.

Ages.	Average ann. rate of Mort. p.c. for the 10 years, 1840-49.				Annual rate of Mort. p.c. 1853.			
	Males.		Females.		Males.		Females.	
	France.	E. & W.	France.	E. & W.	France.	E. & W.	France.	E. & W.
All ages	2'380	2'338	2'319	2'180	2'203	2'379	2'189	2'201
0-	8'455	7'224	7'545	6'187	7'355	7'346	6'383	6'362
5-	1'049	'947	1'004	'941	'822	'847	'882	'813
10-	'536	'520	'641	'539	'518	'506	'630	'540
15-	1'034	'834	'841	'862	'889	'828	'848	'861
25-	1'002	1'009	'969	1'067	'874	1'013	'928	1'064
35-	1'096	1'292	1'103	1'291	'985	1'316	1'007	1'251
45-	1'476	1'849	1'488	1'605	1'474	1'958	1'339	1'596
55-	2'919	3'205	2'727	2'867	2'893	3'278	2'732	2'845
65-	6'069	6'805	6'349	6'138	6'521	6'912	6'598	6'133
75-	16'166	14'904	14'484	13'694	16'022	15'897	15'376	14'106
85-	32'027	30'836	27'194	28'685	29'273	31'297	29'371	28'968
95- & upwards	46'240	47'305	35'793	46'384	38'422	47'305	35'966	45'770

The first portion of this T. was constructed from the estimated pop., and from the deaths at different ages during the period it covers, as given in the *Annuaire de l'Economie Politique*. Here the mort. of France is higher than the mort. of Eng. and Wales; but at certain ages in the middle period of life, the mort. of the English people considerably

exceeds the mort. of the *French*. This, it was believed, is due to the bad sanitary condition of all the English towns in the years 1840-9; and especially to the greater proportion of town pop. in Eng. In years of scarcity, however, the pop. of France suffers more from privation than the pop. of Eng. "France has no system of ins. against death by starvation extending over the whole pop., such as is now imperfectly provided in Eng., Scot., and Ireland, by the Poor Laws;" and the failure of the crops fall heavily upon the small proprietors, who can draw the means of living from no other source than their parcels of land. "The water supply in the French towns is bad, and their system of cesspools is abominable; hence they have suffered severely from cholera."

In the second portion of the T. it will be observed that the mort. of *France* is rather less than the mort. of England, in the particular year under notice. "But the rate of mort. bears differently on different periods of life in the two countries."—18th Rep. Reg.-Gen. p. xxxi.

1854.—The deaths in *France* this year exceeded the births by 69,318! The mort. of the pop. of France was 2·746 p.c., while the mort. of the pop. of Eng. in the same year was 2·352 p.c. The deaths by *Cholera* were estimated at 150,000. The deaths by the scarcity which began in 1852, was sensibly felt in 1853, and prevailed with much intensity in 1854. M. Legoyt set down at 60,000.

The deaths of the male portion of the pop. of France cannot be correctly compared with the male pop. of England for this year: for in addition to the causes noted, the deaths of the French soldiers in the *Crimean War* were returned to *France* and entered in the Civil Regis. [See sub-section *Registration*, etc.] Comparing the female rates only, we have the following result: *France*, 2·721 p.c.; *Eng.* 2·273.

The circumstances of this year will be discussed in greater detail under sub-section *Population*.

1856.—The death-rate throughout *France* this year was 23·2 p. 1000 of the pop. In *Belgium* it was 21·5; in *England* 20·8. But in the two latter countries this was a particularly healthy year. In *France* it was not so.

1862.—According to the *Pays* the following were the rates of mort. p.c. for the whole French Empire, and for eight of its principal towns:

	In 1845.	In 1862.		In 1845.	In 1862.		In 1845.	In 1862.
All France	2·28	2·20	Bordeaux	3·39	2·50	Nantes	2·56	2·24
Paris	3·12	2·50	Marseilles	3·43	2·80	Lille	3·24	2·74
Lyons	3·13	2·47	Rouen	3·60	3·13	Toulouse	2·62	2·20

1864.—The Reg.-Gen. of England in his 25th Rep. said: "The death-rate of France agrees closely with that of Gt. Brit. and is rather below it; but the mort. there fluctuates largely, and the average rate is above that of England."

1866.—Dr. Farr said: The death-rate of France was, until recently, 23 p. 1000. It is now 22.

1869.—The Journ. *L'Assurance Française et Etranger*, for 1870, gave the following return of the accidental and violent deaths of France; but—with that remarkable disregard for dates shown by French journalists—omitted the very important fact of the year to which the figures refer. We have assumed they were for the year preceding. The T. was preceded by the following characteristic remarks:

It will not be without interest to the insurance world to give the exact number of deaths from accident, with their causes, for the whole of *France*. The gross number of accidental deaths was 13,301. Of these 11,096 belonged to the base sex, and 2205 only to the most beautiful half of the human race. The ladies have no cause to complain: for we see that if there is a provision for children and drunkards, there is also one for the sex to which we owe our mothers.

Arising from	Men.	Women.	Arising from	Men.	Women.
Drowning	3781	801	Falls from windows and scaffolds	1202	143
Carriages.....	1092	119	Bursting of firearms	136	296
Falls	379	33	Lightning	80	39
Falls of stones and other heavy substances	310	31	Asphyxies	294	59
Machinery	203	25	Starvation, cold, or fatigue	221	39
Steam explosions	26	4	Excessive use of stimulants	287	62
Railways.....	234	11	Sudden & natural death(?)	1531	359
Quarries and precipices.....	266	27	Various causes	560	142

These are clearly only the principal causes, as the numbers stated are not exhausted by the enumeration. Why "sudden and natural" [does it mean *unnatural*?] death should be included in the T. does not appear. The fact of more than twice as many females as males dying from the "bursting of firearms" is very remarkable! Is there any error here?

1870.—The death-rate in France this year was 28·8 p. 1000, against 23·3 in the 10 years 1859-68. The ages of 84,713 persons whose deaths were regis. in the Department of the Seine were not given in the official returns. These incidents were prob. both due to the war. (See sub-section *Population*.)

1873.—The mort. of children under 5 years of age in *Paris* this year was 10·6 p.c. of the numbers living at that age. In *London* the mort. was 7·2 p.c.! In the 5 years

1856-60 the ann. rate of mort. p.c. for children under 5 years of age in France was 7.9. In 1871 (the year of the siege) it was 10.1 p.c. of pop.; but in 1862 fell to 6.8 p.c. In England the rate declined from 6.8 p.c. in the 10 years 1851-60 to 6.2 in 1873.—36th Rep. Reg.-Gen. p. xxiv.

Diseases.—The diseases most frequently observed in Paris are pulmonary phthisis, pneumonia, and typhus fever; nervous and brain diseases, measles, croup, smallpox, etc. The spring is the unhealthiest season, and the months, as regards mortality, may be classed thus: March, April, February, January, December, May, June, July, August, November, September, October. Pulmonary phthisis, so common in Paris, is still more more destructive in the Department of the Rhone, and especially at Lyons. It attacks many females in the valleys of the Jura and the Hautes-Pyrenees, and is frequent in Corsica in spite of the southern position of the island. Scrofula abounds amongst the poorer classes at Bordeaux and the poor agriculturists of La Vendée, of the Gard, and of Auvergne. Scurvy attacks the population of the Atlantic Coast, and sometimes appears in the marshy districts of La Brisse. Wherever marshes and ponds abound, intermittent fever is present. Typhus fever, comparatively rare in country places, is very common in all important towns, especially in Paris. The sweating fever, characterized by a miliary eruption, formerly confined to Picardy, has spread into Normandy, into the centre of France, and as far south as the Haute-Garonne and the Var. Outbreaks of cholera are most fatal in populous southern towns; some places in France which are situated very high above the level of the sea are exempt from this plague. The inhabitants of the mountains are, however, subject to diseases of the heart and congestion of the lungs and brain. The use of maize flour, which contains a microscopic fungus, produces in the Landes and Haute-Garonne a strange illness, called the pellagre, which has only lately received scientific attention. Prostration of strength, disorder of the digestive functions and nervous system, and a constant redness of the back, hands, and face, are symptoms of this poisoning, which generally ends in insanity and death. A similar disease, called ergotism, or St. Anthony's fire, is found among the inhabitants of Sologne, Artois, and Gatinais. It is caused by eating flour infested by cryptogamous parasites, such as ergot of rye. In several valleys of the Lyonnais, the Vivarais, the Haute-Garonne, and the Pyrenees, there are fresh and limpid springs of water entirely devoid of iodine—always present in wholesome water. The use of these springs produces goitre. Dysentery is very fatal in the autumn to the rural population, especially in La Vendée, and in some parts of Normandy, owing to the abuse of unripe fruit. The progress of insanity in France excites much attention, and is ascribed to the increasing abuse of tobacco, absinthe, and alcoholic drinks. (See sub-section *Insanity*.)

Emigration.—There is scarcely any emigration from France; the only exodus that has taken place in recent years consisting in a movement of the Basques, in the Department of the Hautes-Pyrenees, to quit the country in order to escape military service. In 1873 there emigrated 10,000 Basques to South America, chiefly to the Argentine Confederation and Uruguay. In 1874 the number rose to 12,000.

The stationary character of the mass of the pop. is shown also by there being little immigration within the country. At the census of 1872 it was found that of the total of 36,102,921 individuals constituting the pop. of France, 30,676,943 were born within the registration districts. Thus out of every 100 individuals but 15 had quitted their native commune; and 85 lived where they were born. Almost the whole of the existing migration is that from the rural districts into the towns of France.—Martin's *Statesman's Year-book*, 1877.

Fecundity.—This subject presents itself for consideration under several of the sub-sections of this division of our subject.

1840.—M. Hippolyte Passy communicated to the Academy of Moral and Political Sciences a paper: *On the Division of Property and its Influence on the Distribution of Wealth*, wherein some curious facts are furnished regarding the productiveness of marriages. The author says that in Europe marriages are generally less fruitful in large towns than in small ones, and in these than in the country. Thus in France from 1826 to 1836 there were born ann. on an average 904,702 legitimate children; and as the ann. average number of marriages was 256,947, it followed that there had been produced by each marriage rather more than 3.52 children. In those towns of France which contain 20,000 inhabitants and upwards, and which are 39 in number, there was a total pop. of 2,634,532 persons: among whom, from 1826 to 1836, there had been on an average 65,290 legitimate births p.a., and 21,274 marriages; which numbers give 3.05 children for each marriage. This number is less than the general average number for the whole of France by 0.47; and less than the corresponding number for towns with pop. under 20,000 by 0.51. This difference is believed to depend in some of the large towns upon the composition of their pop.; the numbers being by no means the same for each. *Those that possess the greatest number of wealthy families are found to be the least productive*, while those that are filled with a manufacturing or maritime pop. attain in this respect higher numbers. The six towns where marriages were the *least fruitful* were Mans, Tours, Versailles, Angers, Caen, and Clermont-Ferrand; the average numbers being

from 2·45 to 2·74 for each marriage. The six towns where marriages were the *most fruitful* were St.-Etienne, Nismes, Boulogne, Marseilles, Dunkirk, and Limoges; the average number being from 3·56 to 3·75 for each marriage. In these latter towns, where the pop. was employed to a considerable extent in manufactures and other laborious occupations, the number was greater than the general average number for France. Similar proportions existed for towns of the same Department, compared with each other, according as they were more or less manufacturing. The results presented by the city of *Paris* were very conclusive on this point: the fecundity of marriages in each *arrondissement* being found to vary in almost exactly the inverse ratio of the wealth of each of these districts. Thus the most opulent *arrondissement*, the 2nd, did not give 2 children for each marriage; whereas the poorest, the 12th, gave 3·24.

This view, the author contended, was to a certain extent borne out by historical facts. The ancient families of *Grace*, and more especially of *Rome*, were always complained of as becoming rapidly extinct. In some modern countries the *noblesse* of the second order is kept up only by the multiplication of letters patent of creation. Thus in some of the provinces of *Holland*, there did not exist a single family of those formerly inscribed on the registers of the Equestrian Order. At *Berne*, at the end of the last century, there remained only one-half of the noble families who attained a permanent seat in the Councils of the State during the 16th century. Almost all the great historical families in all countries had become extinct.

For some additional facts of the same class, see general title *FECUNDITY*.

1869.—Dr. Farr, after investigating the question as regards *France* (in comparison with Eng.), arrived at the conclusion [30th *Rep. Reg.-Gen.*, 1869] that to each husband in *France* only 3·637 children are born to his one or more marriages; and taking 9 in 10 as fertile, the average family will consist of 4·041 children. Assuming the parents to die at 64, they would leave but 2 children surviving to take their place and succeed to their property. [*FECUNDITY*.] See also sub-sections *Births, Marriages, Population*.

Food (and other products).—**1848.**—There was read before the Statistical So. of Lond. by the Rt. Hon. the Earl Lovelace, a paper: *On the Sub-division of Real Property, and its effects upon Agriculture and the Produce of the Soil in France, shown by the facts adduced in the recent work of MM. Monnier and Rubichon* [*Statist. Journ.* vol. xi. p. 305].

1849.—Mr. J. T. Danson read before Statistical So. of Lond. a paper: *On the Fluctuations of the Ann. Supply and Average Price of Corn in France, during the last Seventy Years, considered with particular reference to the political periods of 1792, 1814, 1830, and 1848* [*Statistical Journal*, vol. xiii. p. 152]. The facts brought together here are of a most instructive character. The scope of the paper may be gathered in the main from its opening para.:

There is an idea, the origin of which does not seem to lie within the range of history, but which is proverbial in many languages, and has been expressly sanctioned by the authority of almost every great writer on the policy of nations, that mankind are *first and most powerfully affected, in their social and political affairs, by the degree of ease with which they obtain their food*. Hitherto the soundness of this idea seems to have been rather taken for granted than proved. . . .

He then proceeds to examine it in relation to the history of France, and arrives at results confirmatory.

1876.—In the *Annales du Commerce Extérieur* was collected a number of official documents on the pop., production, and commerce of France during the past 15 years, from which some interesting comparative statistics may be gathered with regard to the food products of the country. The actual area of France since the peace of 1871 is 528,777 square kilometres, or 132,144,250 acres, and the pop. of the territory, according to the Census of 1872 [instead of 1871], 36,102,921, giving a mean of 268 people per square kilometre. For 1872 the complete subdivision of the surface according to the nature of the crop was not given. The wheat crop rose to 119,034,990 hectolitres, the mean price of which was 23f. 3c.; the vine crop rose to 54,920,181 hectolitres, at a mean price of 28f. 94c.; cocoons rose to 9,883,589 kilogrammes; mean price 6f. 94c. per kilogramme.

The *hectolitre* is equal to 2½ English bushels. The *hectare* is equal to 2½ English acres.

The following shows the production of wheat in hectolitres, with the mean produce and mean price at other periods.

	Total Production. Hectolitres.		Produce per Hectare. Hectolitres.		Mean price per Hectolitre. F. C.
1862	99,292,224	.....	14·43	.....	23 24
1869	107,941,543	.....	15·34	.....	20 32
1873	84,892,667	.....	12·0	.....	25 92
1874	133,130,163	.....	19·36	.....	25 11

The figures relative to the years 1862 and 1869 are on the basis of the old area of France, which was from 1860 to 1870 543,000 square kilometres. The population in 1861 was for the 89 Departments 37,382,225.

We have not for all agricultural products the comparative results of different years ; but the following are the crops for 1872, with the prices :—

	Total Product.	Price. F. C.		Total Product.	Price. F. C.
Maslin	8,471,067 hectolit.	17 89	Tobacco	238,568 quintals	93 92
Rye	29,778,012 „	14 1	Madder	280,415 „	49 76
Barley	20,279,700 „	11 17	Hemp	687,721 „	108 65
Buckwheat	10,900,951 „	10 67	Flax	487,436 „	134 23
Maize & millet	11,635,832 „	14 17	Colza & poppy	828,855 „	107 0
Oats	76,028,801 „	8 15	Olive oil	399,155 „	119 0
Potatoes	110,322,590 „	5 22	Honey	10,587,090 kilogs.	1 30
Chestnuts	5,988,328 „	6 82	Wax	2,736,262 „	2 67
Beet-roots	118,183,758 quintals		Pulse	5,272,801 „	25 22
	(2 cwt.)	2 15	Hops	40,706 quintals	182 62

The following for the same years is the production of beverages in France, in hectolitres (22 gallons) :

	Wines.	Spirits.	Cider and Perry.	Beer.
1862	37,110,000	857,600	5,790,551	6,963,014
1869	70,000,000	764,802	5,737,985	6,498,725
1873	35,715,000	931,950	3,663,712	7,414,466
1874	63,146,000	963,967	5,281,438	7,339,990

The enormous increase of area devoted to beet-root culture, and the enormous increase in the production of native sugar from 1862 to 1872 and 1874 are worthy of note. The culture of the vine was also extended.

	Sugar Manufactured.	Sea and Rock Salt.
1862	161,566,000 kilogrammes	631,000 tons
1869	242,150,000 „	814,000 „
1873	415,727,000 „	599,300 „
1874	431,913,000 „	738,562 „

The kilogramme equals 2 cwt.

It is interesting to compare the production of silk-cocoons in kilogrammes (2½lb.) with the price before the epidemic, and while it was at its height :

	Product.	Price. F. C.		Product.	Price. F. C.
1862	9,758,804	5 32	1873	8,333,128	7 10
1869	8,076,545	7 45	1875	9,021,410	4 61

A considerable falling off is shown in the figures relating to the rearing of horses and cattle. A comparison of the figures relating to 1866 and 1872 shows this very decidedly :

	1866.	1872.		1866.	1872.
Horses	3,313,232fr.	2,882,857fr.	Sheep	30,386,233fr.	24,589,645fr.
Mules	345,243	299,129	Goats	1,679,938	1,791,725
Asses	518,837	450,615			
Oxen	12,733,188	11,284,414	Total	54,886,295fr.	46,675,620fr.
Swine	5,889,624	5,377,235			

No doubt this diminution is partly to be set down as a consequence of the war.

Hospitals, etc.—The hospitals and kindred inst. in France are unusually numerous. We have no specific details to offer : but many facts regarding them occur in the course of this article.

1829.—Dr. David Johnson pub. in Edin.: *A General Medical and Statistical Hist. of the Present Condition of Public Charity in France, comprising a Detailed Account of all the Estab. destined for the Sick, the Aged and Infirm, Children, Lunatics, etc.*

Houses.—The total number of dwellings in France at the census of 1872 was 7,704,913, of which 7,409,614 were inhabited, 254,391 uninhabited, and 40,908 in course of construction. There were on the average 14.47 houses p. square kil., and each house contained 1.24 family, or 4.68 persons. Except in the Departments of the Seine and the Rhone, the vast majority of dwellings contained but one family, indicative of a nation of small proprietors.—*Martin's Statesman's Yearbook.*

Houses in the cities of France are usually well built, and very nearly of fireproof construction. [FLUES.]

Infanticide Mort.—The proportion of births to each marriage being less in France than in any other country of Europe, it would appear more incumbent upon parents to take especial care in the rearing of their offspring. But the very reverse has been found in practice. Hence the progress of the pop. of France has received a check in a twofold point of view. We proceed to present a few of the leading details of modern inquiries.

1861.—Dr. Bouchat presented to the Academy of Sciences a statistical account of the mort. of children during a period of 20 years, viz. from 1839 to 1859, taken from the Registration of Public Assistance. One of his T. comprised 48,525 children deposited at the Foundling Hospital ; another T. comprised 24,169 children sent to nurse by the

administration. The principal results at which this writer arrived were the following: 1. The mort. among children in France amounts to 1 in 6 during the first year of life, while formerly it was one-fourth. 2. Within the same period, the mort. of males, taken alone, is one-fifth; among females one-sixth. 3. The mort. is greater among the children of the poor than among those of the rich. 4. Cold weather increases the mort. of newly-born infants; and in winter the children cannot be taken either to the maire or the church (for regis. or christening) without danger. 5. Among foundlings the mort. is 11 p.c. during the first 10 days of life, and 55 p.c. within the first year. 6. Dry nursing or bringing up by hand greatly increases the chances of death among foundlings. 7. The mort. among children of the middle classes sent out to nurse is 29 p.c. within the first year. 8. Within that period the mort. is greater in the 13 Departments round *Paris* than in any other Department in France. This, it was thought, was due in part to the greater number of foundling hospitals, and in part to the evils of town life.

1866.—M. Husson made a Rep. in regard to the Pop. and Vital Statistics of *France*, wherein he presented the following details. In France generally the mort. of young infants may be taken at from 19 to 20 p.c. In the Hospice des Enfants it used to be, from 1839 to 1858, 55·88 p.c. In 1864 it had fallen to 39·26 p.c., or double the average mort. in the whole of France. The mort. of the children in Paris confided to the care of nurses increases. From 1839 to 1858 it was 29·71 p.c.: from 1859 to 1864 it ranged from 30·02 to 40·07—average 33·93. About one-fourth of these were illegitimate, and born under unfavourable circumstances. In some of the Departments the mort. was terrible: Manche, 85 p.c.; Indre and Loire, 62; Côte d'Or, 65; Seine and Oise, 69; Aube, 70; Eure and Calvados, 78; Seine Inférieure, 87; Loire Inférieure, 90! M. Husson explains the difference thus: In Paris children are benefited by the "Direction des Nourrices"; children sent out of Paris are left to the tender mercies of private nurses. Formerly the children put out by the "Direction" amounted to 10,000 ann.; now, with a greatly increased pop., it is hardly 2000. The explanation—private offices pay prems. to midwives and some accoucheurs for procuring children to be nursed to death!

About this date, in consequence of the serious disclosures we have noticed, the *Société Protectrice de l'Enfance* was founded; and we believe has performed good work in the direction so much needed.

1867.—In M. Jules Simon's work, *L'Ouvrier de Huit Ans*, pub. this year, is contained some remarkable statistics of the mort. of the children of mothers engaged in the factories at *Mulhausen*, *Lyons*, etc. They confirm the preceding. His theory is, *all neglected children die—and are expected to die!*—See sub-heading *Population*, 1867.

1868.—Out of about 53,400 children born annually in Paris, some 18,000 are known to be sent away to be nursed. The mode of social life leads to an increase of the number. At home there is no room which can be devoted to mother and baby: hence the mothers are driven to the use of the *Maisons de Maternité*. For a similar reason, when the mother returns to her home, the baby has to be entrusted to the *meneuses*—baby-farmers of the worst kind.

1874.—The evils of which we have spoken became sufficiently patent by this date to invoke the action of the Legislative Assembly. A bill on baby-farming was introduced near the close of this year. Under its provisions every infant under two years of age put out to nurse was to be subject to the supervision of the Prefect, aided by a Commission consisting of two members of the Council-General and six persons nominated by him, one of them selected from the medical officers of the Department and the others from managers of charitable institutions for children or adults. Local sub-commissions, including two mothers of families, were to be appointed where desirable. At the Ministry of the Interior there was to be a Central Commission, which would advise the Government as to the working of the Act, and prepare an ann. rep. All these bodies to be unpaid. The Prefect would appoint medical inspectors, who would have jurisdiction over all outdoor nurses and register offices for nurses. Every person placing a child out to nurse to be required to give notice at the Mairie, and every nurse to prove that she had no infant of her own under 7 months old, or that such infant was suckled by a nurse who had no other charge. Both nurses and register offices were to be licensed. The wages of the former were to have priority over other debts, and there are penalties for neglecting or ill-treating infants. The Bill was cordially received by the Chamber, and the Minister of the Interior paid a high compliment to Dr. Roussel and the other members of the Committee by whom it had been framed.

Insanity.—Regarding insanity in France, we have but very few details.

1801.—There were 946 insane persons in the Department of the Seine. The events of the closing decade of the eighteenth century, and of the opening year of the present, were in France, and more especially in Paris, of a nature to unhinge weak minds. Madness showed no remarkable increase under the Restored, nor under the Constitutional Monarchy—when the system of registration, we are assured, was very perfect, and families had ceased to keep their demented members at home.

1846.—The French asylums had their contingents of social reformers, of Messiahs, and founders of religions. That was the time when George Sand gave her apocalyptic

visions to the novel-reading world, and when Pierre Leroux thought he was inspired to write a gospel: and many other religious enthusiasts followed.

1866.—The population of Paris had increased in a threefold ratio, whilst its lunatics multiplied six-fold. This increase was coincident with the sudden raising of the octroi duties, and the rapidly increased importation of cheap wines. The poor man was thus deprived of a wholesome drink. He was in the habit of taking wine at all his repasts, and when it was impossible to furnish him with the pure juice of the grape, at a price he could afford to pay, the vintners drugged their watered *piquette* and *petit bleu* with alcohol. Madness falls heaviest in Paris on the artisans and cooks. Next to them is the trading class. Insanity is not frequent in men belonging to liberal professions, and the proportion is lowest among gardeners and spade-labourers.

1872.—Dr. Lunier, Inspector-Gen. of the French Lunacy Depart., pub. the results obtained from a careful study of all the statistical documents he had been able to collect on insanity in France during the years from 1869 to 1872. He arrived at the conclusion that although during that trying period for Frenchmen from 13,000 to 14,000 cases of mental disease were regis., yet the number of patients confined in private lunatic asylums was much below the average. A similar fact was observed in 1848, which, taken in connexion with the state of things observed by Dr. Lunier, would make it appear that political or social crises, instead of, as is generally imagined, augmenting the number of insane persons, really diminishes it.

During the siege, men went mad in attempting to devise means for destroying the Prussians wholesale. Régnault, an unfortunate engraver, who afterwards poisoned himself for grief at the death of his dog, fancied he had conquered the difficulties of aerial locomotion, and could, if the Government accorded him 2,000,000 fr., construct a balloon which would take 1800 beeves into the beleaguered city. Lunatics, however, not unfrequently amuse themselves in framing constitutions and devising schemes of army reform.

1874.—Out of 2522 cases of insanity, 124 were traceable to hereditary predisposition. But from the shape of the skulls the doctors signing the report are led to think that at least half of the mad people in Paris have had, in near degrees of consanguinity, insane ancestors. Bachelorhood is not favourable to soundness of mind. The ratio of unmarried to married lunatics over 45 years of age is as 882 to 855. Contrary to what one might have expected, more Frenchmen than Frenchwomen go out of their minds.

In every 946 inhabitants of *Paris* there is one lunatic. Of foreigners confined in the public madhouses there are 46 Belgians, 29 Germans, 17 Swiss, 9 Italians, and 5 English. Cures are more frequent in the country asylums of the Paris Municipality than in the city. On the other hand, the demented become more ungovernably insane when sent to distant establishments, such as those of Pont-l'Abbé, Auch, and Toulouse, where they rarely can be visited by their relations. The sight of a relation's face prolongs lucid intervals. The French mind is more liable to become deranged between thirty and forty than at any other period of life.

1876.—Dr. Trélat, the head of the Salpêtrière, and the author of *La Folie Lucide*, Dr. Moreau, Dr. de Tours, Dr. Delaneuve, and other medical men, addressed a Rep. to the Municipal Council on lunacy and lunatic asylums in France. From this document we have drawn many of the preceding details. [INSANITY.]

Longevity.—There is a general belief among writers on Vital Statistics in France that human life is gradually becoming prolonged. This we have seen in several of the sub-sections of this art.; but we lack exact details—which indeed are very difficult of attainment, even if the fact be as stated.

In a statistical work pub. in France some few years since, and concerning which we have no exact details, it was stated that the average ann. number of deaths at the age of 100 and upwards in France is 148, which chiefly occur in the following 15 Departments, arranged in a decreasing order with regard to the number of such deaths recorded in them:—Basses-Pyrénées, Dordogne, Calvados, Gers, Puy-de-Dôme, Ariège, Aveyron, Gironde, Landes, Lot, Ardèche, Cantal, Doubs, Seine, Tarn-et-Garonne. It was stated, as a further fact, that these Departments did not follow the same order as regards the average duration of life, which, therefore, appears to be independent of accidental cases of extreme longevity. Their order in the latter respect in the total list of Departments is as follows: Calvados, 2; Basses-Pyrénées, 9; Tarn-et-Garonne, 13; Gironde, 18; Cantal, 23; Doubs, 25; Puy-de-Dôme, 30; Aveyron, 33; Lot, 33; Gers, 40; Dordogne, 42; Ardèche, 43; Ariège, 48; Landes, 52; Seine, 54. The 15 Departments in which the average of life is most considerable are: The Orne, Calvados, Eure-et-Loire, Sarthe, Eure, Lot-et-Garonne, Deux-Sèvres, Indre-et-Loire, Basses-Pyrénées, Maine-et-Loire, Ardennes, Aube, Tarn-et-Garonne, Hautes-Pyrénées, and Haute-Garonne.

We hope under the general title **LONGEVITY** to present some further facts on this vital question.

Marriages.—The subject of marriages has already been reviewed in this section of our subject under sub-sections *Births* and *Fecundity*, and will have to be considered in further detail under *Population*. The following facts however have to find a place here.

1785.—M. Necker, in his well-known work *De l'Administration des Finances*, estimated the ann. marriages in France at 213,774; but this was taking an average of 10 years: therefore they were greater at the time he wrote. Malthus considers they were 220,000, by which 440,000 p.a. became married out of 600,000 reaching a marriageable age.

1792-1803.—In 1792 a law was passed extremely favourable to early marriages; while in 1803 this law was repealed, and another substituted which threw great obstacles in the way of marriage. Malthus has well pointed out that these two laws will assist in accounting for a small proportion of marriages and births in the 10 years ending 1813, consistently with the possibility of a large proportion in the preceding 6 or 7 years.

1800.—There was pub. in Paris by M. Jaques Peuchet an *Essai d'une Statistique Générale*, wherein the number of unmarried males in France between 18 and 20 was estimated at 1,451,063; and the number of males whether married or not, between the same ages at 5,000,000. The precise date to which his figures refer was not stated, but as he used the expression *en tems ordinaire*, it is regarded as prob. that he referred to the period before the Revolution.

1817.—The earliest records we find of the number of persons ann. married in France begins with this year, when there were 410,488 persons married. From this date onwards we have ann. returns—see sub-section *Population*.

1842.—From inquiries instituted about this date by MM. Mallet, Villermé, and Giulio, the age of males and females at the time of marriage in different parts of France was found to be as follows. A few other places are added to the T. for the purposes of comparison:

Localities.	Ages at Marriage.			
	Men.		Women.	
	Yrs.	Mths.	Yrs.	Mths.
Paris, first marriages (during last century)	29	8	24	9
Lodève, first marriages (working classes)	26	1	24	2
Amiens, first marriages ditto	26	3	25	3
Mulhouse, first marriages ditto	28	5	26	10
St. Marie aux Mines, 1st and 2nd marriages (working classes)	27	0	25	6
Farare, 1st and 2nd marriages (working classes)	30	9	27	6
Geneva, first marriages	29	0	26	10
Canton de Vaud, first marriages, whole pop.....	30	9	27	7
England and Wales, first marriages, whole pop.	27	3	25	3
Continental Sardinia, first marriages, whole pop.....	29	0	24	0

Where not otherwise stated, the first and second marriages are undistinguished. In some other cases the basis of observation was too limited to be adopted with entire reliance.

1866.—The annexed is a comparison of the mean ages at marriage in France and in Eng. and Wales respectively.

On the whole, the resemblance is very striking. *Men* marry from 2 to 3 years later in France than in England. *Women* at the same ages in the two countries.

1870.—The marriage rate of this year fell from the average of 15·8

p. 1000 of the pop., which it had maintained during the 5 years 1864-8, to 12·4 p. 1000. This was one of the direct consequences of the war.

1875.—Some statistics were pub. by the official authorities with regard to the age at which women marry in Paris. Out of 1000 marriages contracted in this capital, 32 of the brides were from 15 to 16 years of age; 101 from 16 to 17; 219 from 18 to 19; 233 from 20 to 21; 165 from 22 to 23; 103 from 24 to 25; 60 from 26 to 27; 45 from 28 to 29; 18 from 30 to 31; 14 from 32 to 33; 8 from 34 to 35; 2 from 36 to 37; 1 from 38 to 39. Here the marriages take place at the earlier and not at the later periods of life.

Military Service (Conscription).—Early in 1874 a voluminous Rep. was distributed to the Deputies on the operations of recruiting during 1873. It gave some interesting particulars on the manner in which the new law on compulsory military service was working: 303,510 young men figured on the lists; 30,433 were excused on the ground that they were suffering from diseases which rendered them unfit for service. The list of these diseases is curious from a physiological point of view. They are classed as follows: Skin diseases, 795; blindness, 120; loss of an eye, 1325; squinting, 125; short sight, 527; various diseases of the eye, 1879; deafness, 691; loss of teeth, 315; stuttering, 529; wens, 416; scrofula, 1336; heart disease, 735; consumption, 522; hernia, 1942; loss of the use of an arm or leg, 1883; mutilation of fingers, 1038; varicose veins, 818.

	France, 1866. E. & W., 1861-70.	
	Years.	Years.
Total men married	29·9	27·8
Total women married	25·7	25·6
Bachelors married	28·3	25·7
Widowers married	42·4	42·4
Spinsters married	24·8	24·3
Widows married	38·3	39·1

There were also dispensed from active service in time of peace eldest orphans, 3569; sons or grandsons of widows and of blind fathers, or fathers 70 years of age, 817; eldest of two brothers of military men in the active army, 18,085; brothers of military men who died on the field of battle or have been placed on half-pay for wounds or infirmity, 7041. The number of men dispensed from serving as pupils of public schools, seminaries, teachers, sailors, and one year volunteers, is 24,869. Again, 28,376 young men were classed in the auxiliary services on account of infirmities or ailments which rendered them unfit for active service; 21,022 were sent back till next year in order that they may have time to acquire physical development which may render them fit for service, while 151,039 were men inscribed on the list as fit for service. A ministerial decision has divided them as follows: 95,155 to serve 5 years, and 55,884 who can be sent home after 1 year or 6 months' service. The 95,155 men of the first portion were distributed as follows: Infantry and artillery of marine, 5023; infantry of the line, 52,272; cavalry, 13,510; artillery, 16,100; engineers, 2450; military equipages, 3070; administrative troops, 2730. The rep. says that the year 1872-73 gave 56,116 young men unable to read or write, 6905 able to read only, and 230,245 able to read and write. The number of young men who voluntarily enlisted is 16,987, of those who re-engaged themselves, 5504.—See sub-section *Population*, 1867.

Population.—In the early part of this art. we have given a T. of the pop. of France at stated periods. We here have to consider some of the questions which are associated with the subject, and which may explain why that growth has not kept pace with the growth of other and neighbouring countries. Much attention has of late been drawn to the considerations here involved; and a very general impression prevails that the "fruits of philosophy" are engaged in a continuous warfare against the forces of fecundity.

We divide the subject into sub-sections for convenience and clearness of treatment.

1778.—M. Moheau pub. in Paris: *Recherches et considérations sur le Population de la France*; wherein he treats of the importance of the pop. to the State; of the utility of researches into the subject; estimates the pop. of France, and the proportions of each sex and age; the different classes of which the pop. is composed; the growth (*de la Taille*) and force of the pop.; on fecundity; on the mortality; on migration and emigration; on the increase of the pop.; on the causes of the progress and decline of pop.; on the physical causes affecting the pop., as the air, the hills and valleys, the climate, etc.; and finally on the indirect causes, as the government of the country, the means of subsistence, the marriage laws, etc. This work, considering the then small amount of knowledge prevailing upon many of the points treated of, was quite remarkable; and is instructive reading at the present day.

1792.—Mr. Arthur Young, the great agriculturist, pub. this year: *Travels during the years 1787, '88, '89, and 1790, undertaken more particularly with a view of ascertaining the Cultivation, Wealth, Resources, and National Prosperity of the Kingdom of France*.

1793.—The same author pub.: *The Example of France a Warning to Gr. Brit.*

These works contain many important facts regarding the pop. and social condition of France, and are often quoted in that connexion. They each passed through several ed.

1798.—Sir Francis d'Ivernois, LL.D., pub. in English, *Des Causes qui ont amené la Revolution du 4 Septembre et de ses Resultats; or, an Historical and Political View of the Losses which the French Nation has suffered by the Revolution and the War, in its Pop., its Agriculture, its Colonies, its Manufactures, and its Commerce*. A suppl. was pub. in 1799.

1799.—He also pub.: *Tableaux des Pertes que la Revolution et la Guerre ont causée aux Peuple François*.

These works attracted much attention at the time, and indeed for many years afterwards; but their statements were regarded as being frequently much exaggerated. [WARFARE, ITS EFFECT ON POP.]

1800.—Mons. J. A. Mourgue pub. in Paris: *Essai de Statistique*, containing a memoir of the marriages, births, and deaths, that took place amongst the inhabitants of *Montpellier* during 21 successive years from 1772 to 1791 inclusive; and also some meteorological T. and obs. made during a term of 14 years, from 1772 to 1785 inclusive; which gave a very instructive view of the climate of that part of France. [MONTPELLIER, MORT. T. FOR.]

1803.—In the 2nd ed. of Malthus' *Principle of Pop.* pub. this year, was contained 2 special chap.: "Of the checks to pop. in France," wherein some of the authorities already quoted and many others are examined. The subject is here treated of in too controversial a manner for us to follow. In the 6th ed. 1826, there are some supplemental statistics which we shall deal with under later dates.

1805.—M. Jaques Peuchet pub. in Paris: *Statistique Elementaire*, wherein he gave the returns of births, marriages, and deaths for the 3 years ending 1802, as 1 in 28'35; 1 in 132'078; and 1 in 30'09 respectively. But there appears to have been some mis-calculation involved: for M. Prevost, of Geneva, in his trans. of this work, gives in a note the proportions in 1801 as follows: births, 1 in 33; marriages, 1 in 157; deaths, 1 in 384.

1814-15.—The boundaries of France were adjusted during these years, and this fact has to be regarded in estimating the pop. and other collateral facts under observation.

1822.—In the *Annuaire* of the *Bureau des Longitudes* (for 1825) the numbers of marriages, births, and deaths for the 6 years ending 1822 are given, showing the ann. proportions as follows :

Marriages.	Births.	Deaths.	Excess of births above deaths.
218,917	957,875	764,848	193,027

The pop. of France, according to an enumeration in each Department in 1820, had been ascertained to be 30,451,187. It therefore appeared that the proportion of annual births to the pop. was as 1 to 31·79; the ann. mort. as 1 in 39·81; and the proportion of ann. marriages as 1 to 139. The proportion of births to deaths was as 125·23 to 100, or very nearly as 5 to 4; and the proportion of marriages to births as 1 to 4·37. The proportion of illegitimate to legitimate births was as 1 to 14·6; the proportion of male to female births as 16 to 15; and the proportion of the ann. excess of the births above the deaths to the whole pop. (which, if the returns were accurate, determines the rate of increase) as 1 to 157.—Vide *Malthus*.

1826.—*L'Annuaire pour l'An 1825* contained two T. 1. "Law of Mort. in France," indicating how many out of 1,000,000 children supposed to be born at the same time, will remain alive after a given number of years. For example: at 20 there only remained 502,216, or rather more than one-half; at 45, but 334,072, a little more than one-third. Thus of 20,000 children born almost every year at Paris, only one-half attain the age of 20 years, and only one-third the age of 25 years. 2. "Law of Pop. in France." Thus out of 10 millions, 5,981,844 were 20 years old and upwards, and 5,808,264 were 21 and upwards. Each of these T. was based upon the Mort. T. of Duvillard, corrected by M. Demontferrand.—See sub-heading *Mort. Tables*.

1826.—The following comparison of the elements of pop. is based upon the returns of the *English* census of 1821, and of the *French* census of this year—the latter being more complete than the former :

	England.	France.
Ratio of males to females	95764 to 1	.....
„ male births to female	1'0435 to 1	1'0656 to 1
„ „ deaths to female	1'0024 to 1	1'0180 to 1
„ „ legitimate births to female .....	.....	1'0679 to 1
„ „ illegitimate births to female .....	.....	1'0484 to 1
„ pop. to marriages in one year	122'50 to 1	132'619 to 1
„ „ births in 1 year	32'274 to 1	31'535 to 1
„ „ deaths in 1 year	54'296 to 1	39'423 to 1
„ births to marriages	3'5902 to 1	4'205 to 1
„ legitimate births to marriages .....	.....	3'912 to 1
„ increase of the population annually.....	1'0167	1'0063

M. Benoiston de Châteauneuf, in the *Annales des Sciences Naturelles*, this year (1826), gave the following numbers as the ratios of the births to the marriages in the countries named : In *Portugal* 5·14; *Bohemia*, 5·27; *Lombardy*, 5·45; *Muscovy*, 5·25; and in several of the southern Departments of *France*, above 5.

1830.—The marriages this year in *France* amounted to 270,435; the births to 898,594, giving an average of 3·322 ann. births to each marriage. The average of ann. births to each marriage during the 5 years terminating this year was 3·569. The average ann. birth-rate compared with the marriage-rate had been greater from the year 1817 to 1822 than now.

1831.—In the *Annales d'Hygiène Publique*, of this year, there was a note by M. Villermé on the "Fertility of Races," which has engaged much scientific attention.

1836.—The total population of *France* this year was 33,540,910, of which number 4,951,684, or 14½ p.c., inhabited the chief towns of each arrondissement. Much additional information was obtained. See sub-heading *Census*.

1841.—Mr. G. R. Porter, then of the Board of Trade, in a paper read before the Statistical So. of Lond. in 1842 [vol. vi. p. 6], compares the increase of the pop. of Eng. and France from 1801 to 1841, with the following results :

Year.	Eng. and Wales.	France.	Increase p.c.	
			England.	France.
1801	8,872,980	27,349,003	...	...
1821	11,978,875	30,461,875	35'00	11'38
1831	13,897,187	32,569,223	16'01	6'91
1841	15,911,725	34,194,875	14'49	4'99

On the whole period the increase in *France* had been 25 p.c., "not quite one-third of the rate of increase in Eng."

1848.—At the Statistical Sec. of the British Asso. Meeting at Swansea this year, there was read: *Abstract of the Rep. of a Tour in the Five Departments of Brittany, during the Years 1840 and 1841, under Instructions from the Academy of the Moral and Political Sciences, made by MM. Benoiston de Châteauneuf and Villermé, Members of that Academy.* The Rep. appeared in vol. iv. of the *Memoirs of the Academy of the Moral and Political Sciences of Paris*; and an abstract is pub. in the Rep. of the Asso. for that year. But a more complete abstract is given in vol. xiii. of the *Journ. of the Statistical So. of Lond.* p. 134. We find therein the following:

In the course of 15 years from 1821 to 1835 inclusive, there had been recorded in Brittany 1,267,140 births; 1,094,350 deaths; and 289,890 marriages; or on the average of each year 83,809 births, 72,956 deaths, and 19,326 marriages. Dividing this time into three periods, the results are as follows:

	1821-26.	1826-31.	1831-36.
Mean pop.	2,470,640	2,548,230	2,597,000
One birth to	29'86	30'24	30'68
One death to	30'08	33'12	33'68
One marriage to	133'00	130'80	130'00

In *France* generally at the same period the results were:

	1821-26.	1826-31.	1831-36.
Mean pop.	31,160,400	32,214,080	33,055,060
One birth to	32'06	32'98	33'90
One death to	40'72	39'50	38'60
One marriage to	129'00	126'00	127'00

Thus the *deaths* only present an increase which is not paralleled in *France* generally; but the succession of generations appears by every indication to be positively most rapid in Brittany. The proportion of *births to each marriage*, however, is seen to be 4'19 in Brittany, while it is only 3'59 in the rest of the kingdom. In Finistère the number rises to 4'26, in Côtes-du-Nord to 4'43, and in Morbihan to 4'51; but it descends in the region of the large towns to 3'99 in Ille-et-Vilaine, and 3'72 in Loire-Inferieur; the manners of the country being here scarcely Breton. The number of illegitimate children in Brittany had averaged during the 15 years 2782 p.a., or 1 to 30'12 of the total number of births; while in *France* generally it was 1 to 13'81. The maximum of births, deaths, and marriages to the pop. falls in Finistère, and the maximum of children to each marriage in Morbihan. In Finistère the births were 1 to 26'57 of the pop. ann., the deaths 1 to 31'866, and the marriages 1 to 116'9. This is one of the most Breton of all the departments of Brittany; and the results which it offered were regarded as very remarkable.

From inquiries in a number of purely agricultural villages in the Depart. of Lower Brittany, it appeared from the evidence of 6424 marriages that the average age of first marriages for the men was 28 years and 4 months, and for the women 25 years and 11 months. Although there were a few cases of young girls marrying under 21, the contrary was the case with the youths, owing, it was thought, to the law of conscription, which would take them away at 20 years of age. Another unforeseen result from these inquiries was the number of cases in which there was a great disproportion of age between the married—the women being often 35, 40, or 45, while the husband was yet scarcely 30; "for which difference the usual grosser motives were assigned."

1851.—Mons. C. Noirot pub. in Paris: *Etudes Statistiques de Dijon, depuis le 17^e siècle jusqu'à nos jours.*

1853.—M. Legoyt, in his Ann. Rep. for this year [*Statistique de la France, deuxième série*], gave a variety of valuable details, which, attracting the attention of the Reg.-Gen. of E. and W., induced him to make a series of comparisons with the statistics of our own country, which are of the utmost interest.

The first point remarked upon is the relative proportions who sign the marriage regis. in the two countries:

There can be no doubt that the analysis of the relative numbers that sign the marriage regis. with marks, and that write their names in the national returns, throws more light on the permanent results of elementary education than any other test that has yet been devised. That view of the matter is now taken by foreign statisticians; and this interesting item appears for the first time in the French returns.

It is a remarkable fact, that, exclusive of the metropolitan cities, in Eng. and France, nearly the same proportion—34 in every 100—of the *men* who marry do not write their names in signing the marriage regis. The exact proportion of the ignorant men in France is 33'70; in England it is rather more, or 33'93 in 100. The French *women* are even less versed in writing than English women: for of French women 55 in 100 did *not* write their names; of English women 48 did *not* write their names, but made their marks. Both the proportions are deplorably high, and show how much has to be done to convey the first rudiments of instruction to the great body of the people of the two most enlightened nations in the world.

Some T. which follow, showing the relative mort. of *France* and *Eng.*, have already been given in sub-section *Deaths*. But the real point of interest in M. Legoyt's Rep. is in relation to the fecundity of the French people, which falls to be considered in chronological sequence, next year. In the mean time we have to place on record, as belonging to this year, the following T., which, inasmuch as it presents "corrected results," will differ in some slight degree from some of the examples which precede or follow it. It is the first pub. T. of the ages of the pop. of France.

	Estimated Pop. 1853.			Deaths, 1853.			Ann. Rate of Mort. p.c. 1853.		
	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.
All Ages	36,225,000	18,014,687	18,210,313	795,607	396,917	398,690	2'196	2'203	2'189
0—	3,365,623	1,705,481	1,660,142	231,411	125,437	105,974	6'876	7'355	6'383
5—	3,338,674	1,698,695	1,639,979	28,424	13,966	14,458	851	822	882
10—	3,187,918	1,623,756	1,564,162	18,259	8,406	9,853	573	518	630
15—	6,205,900	3,088,757	3,117,143	53,881	27,451	26,430	868	889	848
25—	5,645,863	2,824,967	2,820,896	50,885	24,694	26,191	901	874	928
35—	4,993,400	2,512,010	2,481,390	49,729	24,738	24,991	996	985	1'007
45—	4,220,634	2,121,352	2,099,282	59,376	31,200	28,116	1'407	1'474	1'339
55—	2,919,867	1,346,902	1,572,965	81,942	38,970	42,972	2'806	2'893	2'732
65—	1,715,708	814,106	901,602	112,580	53,091	59,489	6'562	6'521	6'598
75—	558,536	247,509	311,027	87,476	39,654	47,822	15'662	16'022	15'376
85—	69,335	29,723	39,612	20,335	8,701	11,634	29'328	29'273	29'371
95 & upwards	3,542	1,429	2,113	1,309	549	760	36'955	38'422	35'966
[under 5]	663,912	337,388	326,524	140,822	79,094	61,728	21'211	23'443	18'905
0—	647,419	330,858	316,561	43,490	22,405	21,085	6'717	6'772	6'661
1—	729,758	369,810	359,948	22,493	11,593	10,900	3'082	3'135	3'028
2—	673,682	340,509	333,173	14,215	7,138	7,077	2'110	2'096	2'124
3—	650,852	326,916	323,936	10,391	5,207	5,184	1'597	1'593	1'600

Note by Eng. Reg.-Gen.—The pop. at each age, as given in the *Statistique de la France*, deuxième série, tome ii. pp. 260-1, has here been corrected for increase, on the assumption that the increase has been uniform at every age, and that the same rate of increase has taken place since 1851 as was observed between 1846 and 1851. The deaths are taken from the *Statistique de la France*, deuxième série, tome iii. (1^{re} partie), pp. 31-39. A correction has been made both in pop. and deaths for ages not stated. These numbers have been distributed over the numbers against the various ages. According to M. Legoyt, some of the young children under 5 years of age escaped enumeration.—18th Rep. Reg.-Gen. (1857), p. 188.

Mr. Samuel Brown contributed to the *Assu. Mag.* [vol. iii. p. 17] a paper: *On the Influence of the Ages of the Parents at the Time of Marriage on the Sex of Children and on the Prolificness of Marriages*, which contains many facts of interest on the points now before us.

1854.—The deaths of this year in France exceeded the births by 69,318, as already stated under sub-section *Deaths*. M. Legoyt states that this was the first time such an event had occurred in the then last 54 years. He does not tell us whether it had ever occurred before; he prob. had no means of knowing. The circumstance attracted much attention, and gave rise to many speculations—to some of which the publications mentioned in the later portion of this section owe their origin.

The Eng. Reg.-Gen. found that the pop. of France—36,155,682—produced 923,461 births; while the pop. of Eng. and W.—18,618,760—produced 634,405 births. Thus in France to 1000 of the pop. 26 children were born; in E. and W. the same pop. gave 34 this year. He adds: "A great portion of this difference is not referable to unusual abstinence from marriage in France, as some speculators have supposed, but to the difference in the fecundity of the married women at puerperal ages in the two countries." This is shown by the following:

T. showing for ENGLAND and FRANCE respectively, the number of wives, spinsters, and widows enumerated in 1851; the number of births in wedlock and out of wedlock, regis. in the 5 years 1849-53; and the ann. average proportion of births in wedlock to wives, and births out of wedlock to spinsters and widows:

	Enumerated in 1851.				Births registered in the 5 years 1849-53		Average ann. proportion of births in <i>Wedlock</i> to 100 wives of the ages		Average ann. proportion of births out of <i>Wedlock</i> to 100 spinsters and widows of the ages	
	Wives of the ages		Spinsters and widows of the ages							
	15-40	15-55	20-40	55-55	In <i>Wedlock</i> .	Out of <i>Wedlock</i> .	15-40	15-55	20-40	15-55
E. and W. France	1,630,456 3,252,746	2,553,894 5,603,781	1,248,182 2,382,824	2,449,669 4,779,896	2,819,964 4,491,269	203,885 349,123	34'591 27'615	22'084 16'029	3'267 2'930	1'665 1'461

The mothers of all children born are included in the women of the ages 15-55, and a large proportion—about seven-eighths—of the mothers are 15 and under 40 years of age. Hence the number of children alive has been divided by the number of women of these ages.

The last 4 cols. of the T. may be read thus: To every 100 wives in E. and W. of 15 and under 40 years of age, the proportional number of all children born alive ann. was nearly 35; in France nearly 28. Or every 100 wives of the ages 15-55 gave birth to 22 children in E. and W.; and to only 16 in France. To every 100 spinsters and widows of the age of 20-40 there were 3'267 children born alive, out of wedlock, in E. and W.; and 2'930 in France.—18th Rep. Reg.-Gen. p. xxxiv.

The following T. were also designed to elucidate the investigation of this question:

Estimated Pop., Marriages, Births, and Deaths in ENGLAND and FRANCE, in each of the years 1853-4.

	Estimated Pop.		Marriages.		Births.		Deaths.	
	1853.	1854.	1853.	1854.	1853.	1854.	1853.	1854.
E. & W.	18,403,313	18,618,760	164,520	159,727	612,391	634,405	421,097	437,905
France	36,225,000	36,155,682	280,609	270,903	936,967	923,461	795,607	992,779

Proportion of Marriages, Births, and Deaths, to the Pop. of ENGLAND and FRANCE.

	Marriages.		Persons Married.		Births.		Deaths.	
	1853.	1854.	1853.	1854.	1853.	1854.	1853.	1854.
E. & W. ...	'894	'858	1'788	1'716	3'328	3'407	2'288	2'352
France ...	'775	'749	1'550	1'498	2'587	2'554	2'196	2'746

1858.—There was read before the Statistical So. of Lond., by Mr. Charles M. Willich, a paper: *Tables relating to the State of the Pop. of Gr. Brit. at the Census of 1851, with a Comparative View, at the different Ages, of the Pop. of France; also a Comparative Return of Births and Deaths, 1838-54* [Statist. Journ. vol. xxi. p. 297] wherein there are many details of interest. The facts regarding the French pop. were drawn from a contribution of M. Mathieu published by the *Bureau des Longitudes*. The following general com-

parative view of the births and deaths in the two countries during the 18 years 1838-55 is interesting:

	England and Wales.	France.
BIRTHS:		
Proportion of Boys to Girls of Legitimate to)	17 Boys to 16·236 Girls	17 Boys to 16·002 Girls.
" Illegitimate Children)	14·663 to 1	12·928 to 1
Proportion of Births to Pop.	1 Birth to 29 Living	1 Birth to 34·42 Living.
DEATHS:		
Proportion of Males to Fem.	71 Male to 69 Females	71 Males to 70·074 Females.
" of Deaths to Pop.	1 Death to 45 Living	1 Death to 70·75 Living.

1861.—The pop. of France at the census this year was found to be 37,472,732. Its density p. sq. mile was 177—being little more than half that of *Eng. and W.*, but about the same as *Ireland*.

M. Maurice Block, the well-known political economist, and Sous-Chef du Bureau de la Statistique Générale de France, offered the following obs. on the census of this year. He states the increase of the quinquennium to have been 1,342,861; but it was composed of two very different elements. 1. The annexation of territories (Nice and Savoy) containing 669,059 inhabitants. 2. The actual excess of births over deaths and of immigration over emigration. If we deduct the increase by annexation, the actual movement of the pop. represents an increase of 673,802 in the quinquennium, or 134,760 persons *annually*. He then compares these results with former periods, and finds that during the last 35 years the rate of increase had been both above and below that for 1856-61. The increase from 1821 to 1861 was over 100,000 p.a. The increase of the last quinquennium M. Block attributed to the disappearance of the cholera, which raged before 1856. But much was also due to the greater prosperity of the people—the abundance of supplies and of employment. The increase of the pop. was not uniform over the whole country. The Departments which had increased embraced the manufacturing and industrial districts; those containing the large towns and cities. There was a decided disposition to migrate from the countries to the towns. M. Block saw nothing to regret in this displacement. He next examines the comparative increase of the pop. of France, with the increase in *England, Prussia, Russia, and Austria*, and proceeds to a consideration of the causes which place France at a disadvantage in this respect. It may be true that the *Gallie* race is less fertile than other races; but the conscription he regards as the primary cause of the difficulty.

1864.—It is stated in the Report of the Minister of Agriculture and Commerce for this year, that the births exceeded the deaths by 145,550—81,494 males, 64,056 females. The same report states that, notwithstanding the increase of the pop., the number of births in France is nearly stationary: therefore "that the growth of the pop. can only be attributed to the longevity of the inhabitants"—which it states has increased between the years 1800 and 1860, from 30 to 38 years. A writer in *L'Opinion Nationale*, in 1867, reviewing the report in question, says:

If life is prolonged by 8 years in a term of 66 years for a pop. of at least 30 million souls, the fact is beyond all dispute, that this simple prolongation of existence has given every 10 years an increase of 1,200,000 persons; and this in effect is the result furnished by the census from 1856 to 1866: consequently the increase in the pop. between 1800 and 1866 is exclusively represented by an increase in the mean duration of life. We are forced to conclude then from this, that the births do not at all help to swell the pop.; whence it also unhappily results that when the duration of life shall have reached its maximum, and this will shortly be the case, the pop. of France will remain altogether stationary for some years: then diminish very quickly, if the number of births on the other hand does not increase in equal ratio.

How the writer came to ascertain that the duration of life in France would then very shortly reach its maximum, does not appear.

1866.—The census of this year revealed the fact that the pop. of France, taken as a whole, is neither diminishing nor stationary, often as such things have been asserted. It appeared that (without including *Savoy* and *Nice*) the pop. had increased in the decade about 1,300,000; and then stood at 37,000,000. The rate of increase thus indicated was about equal to that of *Scotland*, and only half that of *Eng.* But from *Scotland* and *Eng.* there is a continual emigration, while from *France* there is hardly any. The natural growth of the pop. was therefore clearly less in France than in *Gt. Brit.* On the other hand, the death-rate in *France* was steadily decreasing, and the life of the people is becoming prolonged. The birth-rate presents a continued ratio of decrease. Ten marriages, which half a century ago produced 37 children, now only produce 31. The proportion of illegitimate to legitimate births had not varied for 40 years. The falling off in births has been supposed by some writers to be due to what Malthus termed the "preventive check." By others it is attributed to the increasing lateness of marriage. The *Annuaire du Bureau des Longitudes* stated that the average age at which men now marry in France is 30½ years; women at 26. On the other hand, it is seen, in some of the instances furnished in this section of our subject, that people who are determined to

maintain a certain rate of comfort and social dignity, and who cannot dispose of surplus members by emigration, will not multiply beyond their means. The law of advanced communities may prob. therefore be found to be—increasing longevity; diminished fertility.

There was read this year before the Statis. So. of Lond. a paper by Mr. T. A. Welton: *Obs. on French Pop. Statistics, particularly those of Births, Deaths, and Marriages*, [Statistical Journal, vol. xxix. p. 254], wherein is contained much valuable information. The author points out that the increase of pop. in France is not distributed so unequally as in Eng. The following groups of facts show this:

5 years—1841-6.		10 years—1847-56.	
North France, increase	688,445 or 3'4 p.c.	North France, increase	431,406 or 2'1 p.c.
South " " "	484,603 " 3'4	South " " "	204,732 " 1'4
In the last period the great increase of Paris lifted up the per-centage in the northern division of the empire. The divisions which exhibited the highest rate of increase in the respective periods were:			
Mediterranean Coast	6'6 p.c.	Lower Seine	8'7 p.c.
Lower Seine	5'6	Mediterranean Coast	6'9
Lower Loire	4'7	Lower Loire	4'6
Brittany	4'4	Corsica	4'3
Middle Loire	4'4	Middle Loire	3'4
Alsace	4'2		
Corsica	3'9		
Auvergne	3'6		
Lower Soane	3'4		

In the first period all the divisions increased to some extent. In the next period 6 divisions actually lost ground; and the increase in 2 others was merely nominal. In the 5 enumerated the increase, as shown, was over 3 p.c. There was, however, an appreciable increase of pop. during the two periods. Mr. Welton considers the increase of pop. in France to be almost entirely due to the excess of births over deaths. He considers there is a migration of the pop. from one part of the empire to another.

1867.—M. Jules Simon's work *L'Ouvrier de Huit Ans* was published this year. It attracted considerable attention. We propose here to give a brief summary of his arguments, so far as they reach the points now before us. The *English* and the *German* race (he says) not only multiply fast, but spread over the whole earth. The *French* do not colonize, do not emigrate; they increase slowly, and increase only at home. Relatively compared with every other European race (except perhaps the Spaniards), they are diminishing. The rate of increase of pop. is slight beyond example. Eng. doubled her pop. in the first 50 years of this century; that of France rose only from 27 to 36 millions, or 30 p.c., against the 100 p.c. of Eng. Yet during all this period Eng. was peopling *Australia*, *Canada*, *New Zealand*, and the *Cape*, as well as her own island. France was spreading nowhere outside her European limits. The increase, though varying, had been no faster during the last 15 years of prosperity and industrial success. In 1854 and 1855 the deaths even exceeded, and largely exceeded the births. The *marriages*, too, are on the decrease. There was 1 for every 108 inhabitants in 1784, and only 1 for every 122 in 1862. The *births* diminished also: between 1829 and 1833 they averaged 4 to a marriage; between 1851 and 1862 scarcely more than 3. But this is not all: the quality as well as the numbers of the people presents a most unsatisfactory appearance, judged at least by the few statistical tests that it is possible exactly to employ. It is true that *life* is lengthening on the average, owing to the advance of medical science and improved hygienic conditions; but *health*, a vigorous sanitary state of the people, was apparently on the decline. Conscripts were by no means so tall as they used to be. It had been found necessary progressively to lower the minimum standard of height for the service. Thus it was in:

1701	1'624 mètres	1818	1'576 mètres
1803	1'598 " "	1860	1'560 " "

But further: of the 325,000 young men who ann. reach their 21st year and become liable to the conscription, not only are 18,000 found to be too short for military service, or below 4 ft. 10 in. (French), *i.e.* 5 ft. 1 in. (Eng.)—the standard for drummers formerly; but 91,000 others are found to be afflicted with various diseases or infirmities which disqualify them for the conscription. That is to say, just one-third of the entire pop. are found, on reaching manhood, to be either too small, or too sickly, or too feeble to be enlisted in the army. [See sub-section *Military Service*]

The causes, in M. Jules Simon's opinion, to which this unsatisfactory hygienic condition of the French race is to be attributed are three: 1. The *Conscription*, which, by withdrawing from the matrimonial market every year from one-third to one-half of the sound and healthy young men of France, and rendering marriage impossible for them for 9 or 12 years, and often for life, leaves the work of keeping up the pop. and procreating the future generation in a great measure to the inferior and feebler specimens of the race. 2. The increase of *manufactures* and other species of urban industries, which drains the pop. away from the rural districts, and concentrates it in cities, and in the more crowded parts of cities, where the sanitary conditions of life are never so favourable as in the country.

The conscription works in the same direction by first emptying the rural districts, and next because of the discharged soldiers only one-fourth return to country pursuits; the remainder all settle in towns. 3. Principally M. Simon attributes the degeneracy he deplores to the employment of women and children in industrial occupations, particularly in the great factories of *Lyons, Rouen, and Mulhausen*. The children are employed too early, before their growth is developed, and longer than their strength can bear; and the women are employed too universally and too incessantly, so that they can neither nurse their children nor watch over them, nor bring them into the world with healthy constitutions. He supports this position by powerful arguments.—See sub-section *Infant Mort*.

This able work seemed almost to prepare the mind for the disasters which fell upon France in 1870-1 in the *Franco-German war*.

In the autumn of the same year Col. W. H. Sykes, M.P., F.R.S., read before the Brit. Association Meeting at Dundee a paper: *Analysis of the Rep. upon the State of the Empire of France, presented to the Senate and Legislative Body, Feb. 1867* [Exposé de la Situation de l'Empire, présenté au Sénat et au Corps Législatif, *Février 1867*]. The only facts of importance to our present inquiry were the following: Notwithstanding epidemics, which had prevailed very generally in France, the pop. had been gradually increasing during the quinquennium. In 1861 it was 37,386,161 (rectified by the Decree of January, 1863), exclusive of the troops of the army and navy abroad. In 1866 it was 38,067,094—the increase therefore was 680,933. In 58 Departments there was an augmentation, and in 31 a diminution, more or less. The disposition of the rural pop. to become urban was not marked.

1870.—In the following facts we learn something of the influences of war in retarding the growth of the pop., not only in regard to the numbers directly killed, but as in other ways affecting its rate of progression. The deaths in the year were reported to have exceeded the births by 105,887. This remarkable excess was prob. due directly to the war. The birth-rate was 26·1 p. 1000, or about the normal average. It was the marriage-rate which fell off in such a remarkable degree, viz. to 12·4 p. 1000, against an average of 15·8 p. 1000 for the 5 years 1864-8; thus affecting the birth-rate for several succeeding years.

Dr. Farr, in his Supp. to 35th Rep. of Reg.-Gen. of Eng., reviewing the birth and death rates of E. and W. during the 10 years 1861-70, brings *France* into comparison. He finds that the death-rate there during this period was 2·36, differing a little (0·12 in excess) from that of Eng.; but the birth-rate was only 2·63 in *France*, instead of 3·51 as in Eng. "France has no colonial demand for pop., and so the pop. was not depressed by a high death-rate, but by a low birth-rate. *The increase of pop. was only 0·27 p.c. p.a.*

1871.—The census which fell to be taken this year was deferred until the following, in consequence of the war with Germany.

1872.—After allowing for diminution of pop. by the loss of Alsace and Lorraine, the pop. in the 6 years 1866-72, owing to an excessively low birth-rate—as was to be expected from the diminution of the marriages consequent on the war—and to a comparatively high death-rate among children, *decreased* at an ann. rate of 0·16 p.c. This decrease extended over all the Departments of France, with the exception of 14. Of these latter there were but 8 in which the increase exceeded 10,000, viz. Allier, 14,648; Loire, 12,210; Nord, 55,723; Pas-de-Calais, 11,381; Seine, 69,144; and Seine-et-Oise, 46,453. Nearly all these Departments suffered from the events of 1870-1; while many that were not touched by the invasion showed a decrease of inhabitants; thus indicating other causes than those of war for the decline of the pop.

For details of the death-rate of children in France at this date see sub-section *Deaths*.

1873.—Mons. A. Combiér pub.: *Notice sur la Communauté des habitants de Liesse*, in which questions of pop. are discussed.

1874.—The V. Sta. of this year showed an improvement over the previous one, and some others; but still left *France* a long way behind the rest of Europe in regard to progress of pop. The births were 953,510, of which 69,294 were illegitimate; the number of stillborn 44,613. The deaths were 784,856—the births therefore giving an excess over deaths of 168,654. In 1873 the increase was but 100,776; but in 1872 it had been 172,936. So that the improvement of 1874 consisted of a reduced mort. rather than an increased fecundity. Ten Departments presented an excess of deaths over births, to the extent of 6662 in all. In 1873 an excess of deaths had prevailed in 25 Depart. in all to 14,509. The male births exceeded the female births, the numbers being respectively 453,405 and 430,953. The marriages of 1874 were 303,113.

M. Husson laid before the Academy of Moral and Political Science in Paris a statement showing the gradual decrease in the number of *births* amongst the pop. During the period commencing with 1817 and ending with 1830, the births amounted to 1 for 26·91 inhabitants; in that for 1860 to 1865 it was 1 in 31·99; from 1866 to 1872, including the time of the war, it only reached 1 in 34·39. The number of illegitimate children born ann. during the last-named period was 14,613 out of a total of 52,065: but it is mentioned that out of the former number 10,453 were legitimised either completely by the marriage of their parents, or by legal recognition. The number of *marriages* has slightly increased during the century: it amounted to 1 in 104 inhabitants during the period of

1866 to 1872, but the number of children has slightly declined relatively. On the other hand, the proportion of *deaths* has declined; in the past century it amounted to about 1 in 30 inhabitants; between 1817 and 1830 it was 1 in 32·59; in 1860 to 1865, 1 in 39·04, rising again in 1866 to 1872, war time included, to 33·61.

M. Jung pub. his work *France et Rome*, wherein are many important statistics regarding the various religious orders of France. These orders have an influence upon the growth of the pop., as compared with Protestant countries. See sub-heading *Religious Orders*.

1875.—The total number of births this year was 950,975 (being 2600 less than in 1874, but 4000 more than in 1873). The deaths were 845,062 (or 63,000 more than in 1874). The marriages 305,427 (or 2000 more than in 1874). The total increase of the pop. was therefore (subject to correction for emigration) 105,913 (in 1874 it had been 171,943). The total number of illegitimate births was 66,000, against 884,000 legitimate, or 7·4 p.c. In Eng. in 1874 the ratio was 5·3 p.c. The number of stillborn regis. in 1875 was 43,000 (against 43,834 in 1874). What proportion of these latter were illegitimate is not stated.

1876.—According to a return pub. in *Journal Officiel*, the excess of births over deaths throughout the whole empire this year was only 105,913, while in 26 Departments the deaths actually exceeded the births. There were only 305,427 marriages contracted during the year.

A correspondent in *L'Explorateur* drew attention to the fact that the pop. in the French colonies was rapidly dying out, naming particularly *Marquesas*, *Mayotte*, "with its admirable roadstead," and *Nossi Bé*, the gateway to Madagascar, and some others.

The 37th Rep. of the Reg.-Gen. of England, pub. this year (1876), contains an extensive and most important series of T. under the designation of "Vital Statistics of European States." Those regarding *France* will be put under especial contribution for the T. at the close of this section. But the facts relating to the other European States have a distinct value, as affording the means of comparison of the Vital Sta. of those States in relation to *France*. In this sense they have been skilfully used by a well-known writer; and of his paper we shall give a full abstract under date 1877. The results of the Reg.-General's T. will there be made full use of.

Mons. T. Grandjean this year pub. in Paris: *Mémoire sur la décroissance de la population Française*. This work we have not seen.

1877.—Mr. Frederick Martin, "author of the *Statesman's Year-book*," read before the Statistical So. of Lond. a paper: *Births, Deaths, and Marriages, and the Comparative Progress of Pop. in some of the principal Countries of Europe*, mainly based upon the returns contained in the 37th Rep. of the Reg.-Gen. of Eng. pub. 1876. As a matter of convenience, we give the condensed results of the Reg.-Gen. T., combined with the auxiliary T. deduced from them by Mr. Martin; and also accompanied with the commentaries of the last writer. These seem for the moment to exhaust the question of the growth or otherwise of the pop. of France—treated, as it should be, in regard to the countries immediately surrounding it.

BIRTHS.—*T. showing the proportion of Births p. 1000 of the Pop. in 9 of the principal Countries of Europe, arranged in their order of progression:*

Years.	France.	Denmark.	Sweden.	Nether-lands.	E. & W.	Italy.	Spain.	Prussia.	Austria.
1853	25·9	31·9	31·4	33·0	33·3	.....	.....	37·1	40·8
1854	25·7	32·9	33·5	32·6	34·1	.....	.....	36·3	38·4
1855	25·1	32·1	31·8	32·0	33·7	.....	.....	34·5	36·9
1856	26·4	32·6	31·5	32·6	34·5	.....	.....	34·7	39·6
1857	26·0	33·2	32·4	34·6	34·4	.....	.....	38·6	42·9
1858	26·8	33·4	34·8	32·3	33·7	.....	.....	39·4	42·2
1859	28·0	33·8	35·0	34·9	35·0	.....	.....	39·8	43·2
1860	26·2	32·7	34·8	31·7	34·4	.....	.....	38·6	40·6
1861	26·9	31·8	32·6	35·2	34·4	.....	39·3	37·5	40·0
1862	26·5	31·0	33·4	33·1	35·6	.....	38·3	37·0	40·3
1863	26·9	31·1	33·6	36·1	35·3	39·1	37·4	39·3	39·9
1864	26·6	30·3	33·6	35·5	35·4	37·8	38·5	39·4	40·4
1865	26·5	31·4	32·8	35·9	35·4	38·3	37·9	39·1	39·1
1866	26·1	32·2	33·1	35·3	35·2	38·7	37·3	39·2	44·2
1867	26·2	30·5	30·8	35·2	35·4	36·5	37·3	36·9	34·7
1868	25·7	31·2	27·5	34·7	35·8	35·3	34·4	36·8	39·3
1869	25·7	29·5	28·2	34·5	34·8	37·0	35·7	37·7	40·2
1870	25·3	30·5	28·3	35·9	35·2	36·7	35·4	38·1	40·5
1871	22·6	30·2	30·4	35·3	35·0	37·0	.....	33·8	39·9
1872	26·8	30·3	30·0	35·8	35·8	37·8	.....	39·7	39·9
1873	26·1	30·7	30·8	36·0	35·5	36·3	.....	39·7	40·3
1874	26·2	30·8	30·9	36·1	36·2	34·9	.....	40·1	40·1
Ann. } average. }	26·1	31·6	31·9	34·5	34·9	37·1	37·2	37·8	39·9

FRANCE.—VITAL STATISTICS.

The facts here shown are of a very striking character. The falling off of the birth-rate in *France* in 1871 has been mentioned; the birth-rate of *Prussia* was still more affected, as was to be expected. The annexed T. exhibits the comparative birth-rates p. 1000 of the pop., of the whole of the 9 States, arranged according to height of ann. averages.

States.	Average Annual Birth-rate.	Highest Rate in any Year.	Lowest Rate in any Year.
Austria	39·9	44·2	34·7
Prussia	37·8	40·1	33·8
Spain	37·2	39·3	34·4
Italy	37·1	39·1	34·9
Eng. & Wales.	34·9	36·2	33·3
Netherlands	34·5	36·1	31·7
Sweden	31·9	35·0	27·5
Denmark	31·6	33·8	29·5
France	26·1	28·0	22·6

Mr. Martin observes: The birth-rate of both *England* and *Prussia*—two States with a pop. of Teutonic origin, Protestant in religion—is high, and continues rising; while that of *France*—Latin, and Roman Catholic—is low, and remains stationary to a singular degree. Both *Italy* and *Spain* surpass *England* in the proportion of births p. 1000 of the pop. At the same time, while the birth-rate of *Austria*, like that of *France*, is stationary, that of *Italy* and of *Spain* is visibly decreasing, in each case at about the same proportion. In the 12 years from 1863 to 1874 the birth-rate of *Italy* fell 4·2 p. 1000, and in the 10 years from 1861 to 1870 that of *Spain* 3·9 p. 1000. There is reason to believe that the birth-rate of *Spain* has continued falling since 1870; but no official returns exist on the subject. It is noticeable that the birth-rate of the closely-packed pop. of the *Netherlands*, with 185 inhabitants p. square mile, is much higher than that of *Sweden*, which has only 27 inhabitants p. square mile.

Again: It is scarcely necessary to say that the preceding T. do not show the actual position of each of the 9 States so far as high birth-rates denote an increase of pop. In *Austria*, the first on the list, the rate is stationary, with a tendency to decline; while in *Prussia*, the second State, the rate is steadily and markedly progressive. Thus *Prussia* in reality holds the first rank. *Spain* and *Italy* again show unmistakable features of decline in the birth-rate; while the next following country, *England*, exhibits a progressive increase even surpassing that of *Prussia*. As regards the 3 Northern States, only 1 of them, the *Netherlands*, shows progress, the other 2, *Denmark* and *Sweden*, exhibiting steadily declining rates. Thus the progressive movement is reduced to 3 countries, with pop. of kindred race, namely, *England*, *Prussia*, and the *Netherlands*. Contrasted with the figures shown by these States, the birth-rate of *France*, not only excessively low, but quite stationary, is a most singular phenomenon. "The causes of the stagnancy, if not actual decline, of the pop. of *France*, are now occupying some of the most eminent men of that country, but their investigation lies not within the province of the statistician."

DEATHS.—T. showing the proportion of Deaths p. 1000 of the Pop. in 9 of the principal Countries of Europe, arranged in the order of their lowness—i.e. favourable mort.:

Years.	Denmark.	Sweden.	E. & W.	France.	Nether-lands.	Prussia.	Spain.	Italy.	Austria.
1853	24·3	23·7	22·9	22·0	24·5	29·0	.....	.....	35·0
1854	18·5	19·8	23·5	27·7	23·9	27·6	.....	.....	37·4
1855	20·1	21·5	22·6	26·1	28·1	30·6	.....	.....	46·0
1856	18·9	21·8	20·5	23·2	23·4	26·2	.....	.....	31·9
1857	21·9	27·6	21·8	23·8	27·3	28·2	.....	.....	29·6
1858	23·3	21·7	23·1	24·1	27·8	27·6	.....	.....	32·0
1859	20·4	20·1	22·4	27·0	31·2	25·7	.....	.....	30·7
1860	20·2	17·6	21·2	21·4	24·7	23·7	.....	.....	29·8
1861	18·4	18·5	21·6	23·2	25·2	25·3	26·3	.....	31·4
1862	18·4	21·4	21·4	21·7	23·7	24·5	26·8	.....	30·9
1863	18·3	19·3	23·0	22·5	23·2	26·0	28·5	30·8	31·1
1864	23·3	20·2	23·7	22·8	25·1	26·0	30·6	29·7	30·2
1865	23·2	19·4	23·2	24·3	25·8	27·2	32·8	29·8	31·0
1866	20·9	20·0	23·4	23·3	28·7	34·0	28·0	29·0	33·3
1867	20·0	19·6	21·7	22·7	23·6	25·6	29·1	34·2	28·1
1868	19·3	21·0	21·9	24·0	24·8	27·3	32·6	30·5	29·3
1869	19·1	22·3	22·3	23·5	23·0	25·9	32·6	27·7	28·9
1870	19·1	19·8	22·9	28·3	25·7	25·9	30·1	29·8	29·2
1871	19·5	17·2	22·6	34·8	29·4	28·4	.....	30·0	30·0
1872	18·3	16·3	21·3	22·0	25·7	29·3	.....	30·7	32·4
1873	18·6	17·2	21·1	23·3	24·0	28·0	.....	30·0	38·5
1874	19·9	20·3	22·3	21·6	22·6	25·8	.....	30·3	31·3
Ann. Average	20·2	20·3	22·2	24·2	25·5	27·1	29·7	30·2	32·2

The comparative death-rates per 1000 of the pop. of the whole of the 9 States are exhibited in the following T., in such a manner as to show their extreme fluctuations :

It is a notable fact (says Mr. Martin) that the lowest death-rate in all the 9 States shows less variations, not only than the highest, but less than the average annual rate. What is equally noticeable is, that, notwithstanding wars and epidemics, the dif-

States.	Average Annual Death-Rate.	Lowest Rate in any Year.	Highest Rate in any Year.
Denmark	20·2	18·3	24·3
Sweden	20·3	16·3	27·6
Eng. & Wales.	22·2	20·5	23·7
France	24·2	21·4	34·8
Netherlands	25·5	22·6	31·2
Prussia	27·1	23·7	34·0
Spain	29·7	26·3	32·8
Italy	30·2	27·7	34·2
Austria	32·2	28·1	46·0

ferences in the death-rates of all the States are considerably less than those of the birth-rates.

It will also be seen that the death-rate of England is much less subject to fluctuation than that of either France or Prussia, and that it is likewise considerably lower. At the same time, the death-rates of both France and Prussia show a more pronounced tendency to decrease, especially that of the latter State. A noticeable fact is, that while the great war of 1870-71 is very strikingly marked in the French death-rate, which rose from 23·5 in 1869 to 34·8 in 1871, or no less than 11·3 p. 1000, the Prussian death-rate only rose from 25·9 in 1869 to 28·4 in 1871, or not more than 2·5 p. 1000, and was actually lower in 1871 than in 1872. It is evident that the Prussian loss of life is but insufficiently measured by the deaths on the battle-field, but that the war had its enduring after-consequences—*Nachwehen*, says an appropriate German word.

As regards Austria, a strange feature is the extreme irregularity of the death-rate, which, sinking in one year—and this, too, that following a great war—as low as 28·1, rose in another as high as 46. It ought to be remarked, however, that the whole of the vital statistics of Austria cannot be well compared for various periods, as the political organization of the State led to repeated changes in the registration returns. Hungary, with its dependencies, was included in the returns from 1853 to 1862, but excluded subsequently; while up to the end of 1863 the returns embraced also the old Italian provinces.

It may be useful to note at this point that all the countries included in the preceding and following T., with the exception of Sweden and the Netherlands, have been engaged in warfare during the period over which these T. extend. A more minute investigation would prob. reveal in each case the effect produced. We propose, under the general title WARFARE, to consider its influences on the progress of pop. in detail. [See also POP.] It will be sufficient to remark here that war removes men from their homes, and so prevents many from marrying in the ordinary course; while with the married the procreative function is suspended. Again, the deaths are increased, and the pop. thereby reduced at the procreative age. All these influences combined produce a marked effect upon the progress of pop.: and have to be regarded in reviewing the facts here presented.

The following T. exhibits both the average ann. birth-rates and the average ann. death-rates p. 1000 of the pop. of the 9 States, with the surplus, if any, of the birth-rate over the death-rate. The States follow in the order of their average ann. surplus, shown in the last column, representing the increase of pop.:

It is needless to dwell on the extreme significance of this T., the figures of which have an eloquence of their own. "They proclaim very distinctly that there are five States, mainly with inhabitants of Teutonic blood, England, Sweden, Denmark, Prussia, and the Netherlands,

States.	Average Annual Birth-rate.	Average Annual Death-rate.	Surplus of Birth-rate over Death-rate.
Eng. & Wales.	34·9	22·2	12·7
Sweden	31·9	20·3	11·6
Denmark	31·6	20·2	11·4
Prussia	37·8	27·1	10·7
Netherlands	34·5	25·5	9·0
Austria	39·9	32·2	7·7
Spain	37·2	29·7	7·5
Italy	37·1	30·2	6·9
France	26·1	24·2	1·9

the pop. of which is more or less rapidly increasing; that there are three other States, of either mixed or Latin race, the pop. of which grows at a moderate rate; and, finally, that in one State, France, the progress of pop. is almost stagnant, the per-centage of deaths differing not greatly from that of births. One is tempted to exclaim, in the famous words of Lamartine: *Malheureuse France—si riche et si pauvre* (Unfortunate France—so rich and yet so poor!)"

MARRIAGES.—T. showing the proportion of Marriages p. 1000 of the Pop. in 9 of the principal Countries of Europe, arranged in the order of their lowness:

Years.	Sweden.	Italy.	Spain.	Denmark.	France.	Nether-lands.	E. & W.	Austria.	Prussia.
1853	14'4	.....	.....	18'5	15'5	15'5	17'9	16'8	17'0
1854	15'4	.....	.....	17'5	15'1	14'9	17'2	15'4	15'6
1855	15'0	.....	.....	17'1	15'8	14'5	16'2	14'6	15'2
1856	14'9	.....	.....	17'3	15'8	15'1	16'7	18'8	16'3
1857	15'5	.....	.....	18'0	16'3	15'8	16'5	17'6	18'6
1858	16'2	.....	.....	17'5	16'9	15'9	16'0	17'3	18'9
1859	16'6	.....	.....	16'9	16'4	16'3	17'0	14'8	16'7
1860	15'6	.....	.....	16'0	15'8	16'2	17'1	17'5	16'8
1861	14'5	.....	16'5	14'9	16'3	16'1	16'3	17'1	15'9
1862	14'1	.....	16'0	14'7	16'2	15'6	16'1	18'0	16'8
1863	14'5	16'3	15'3	15'0	16'0	16'5	16'8	17'3	17'3
1864	14'0	16'0	15'5	11'3	15'9	16'7	17'3	16'7	17'2
1865	14'1	18'0	15'7	17'8	15'8	16'9	17'5	16'0	18'1
1866	13'4	11'2	15'9	16'8	15'8	16'7	17'5	13'5	15'5
1867	12'2	13'4	14'2	15'3	15'7	16'7	16'5	17'8	18'6
1868	10'9	14'3	13'3	14'6	15'7	15'3	16'1	18'5	17'6
1869	11'3	15'9	16'2	14'7	16'4	15'5	15'9	20'7	17'8
1870	13'1	14'6	12'5	14'7	12'0	15'8	16'1	19'4	14'7
1871	13'0	14'9	.....	14'6	14'4	15'9	16'7	19'0	15'9
1872	13'9	15'0	.....	15'0	19'5	16'4	17'5	18'4	20'6
1873	14'6	15'8	.....	16'2	17'7	17'0	17'6	18'5	20'3
1874	14'5	15'2	.....	16'4	16'5	16'6	17'1	17'9	19'4
Ann. Average	14'1	15'0	15'1	15'9	16'0	16'0	16'8	17'2	17'3

Mr. Martin points out that the two southern States, *Italy* and *Spain*, like the two northern States, *Denmark* and *Sweden*, show a steadily declining marriage-rate. In *Sweden*, it will be seen, the rate fell in one year, 1868, to 10'9 p. 1000 of the pop., being probably the lowest found in recent years in any State of Christendom.

The following T. exhibits the comparative proportion of marriages p. 1000 of the pop. in the whole of the 9 States, ranked according to the *height* of the average ann. marriage-rates:

It is seen that there are enormous fluctuations in nearly all the States between the highest marriage-rate and the lowest, the principal exception being *England*, which points to this country having enjoyed a more uniform prosperity than the rest of the States of Europe comprised in the list.

States.	Average Annual Marriage-rate.	Highest Rate in any One Year.	Lowest Rate in any One Year.
Prussia	17'3	20'6	14'7
Austria	17'2	20'7	13'5
Eng. & Wales.	16'8	17'9	16'0
France	16'0	19'5	12'0
Netherlands ..	16'0	17'0	14'5
Denmark	15'9	18'5	11'3
Spain	15'1	16'5	12'5
Italy	15'0	18'0	11'2
Sweden	14'1	16'6	10'9

The great steadiness of the *English* marriage-rate, compared with that of *France* and *Prussia*, is a notable feature of the above T. The fluctuations during the period were more considerable in the latter than in the former country; while, however, the great war affected the marriage-rate of *France* more than that of *Germany*, the *French* rate falling from 16'4 in 1869 to 12'0 in 1870, or 4'4 p. 1000, and the *Prussian* rate from 17'8 in 1869 to 14'7 in 1870, or only 3'1 p. 1000. It would seem that, on the whole, the tendency towards an increase is most pronounced in *Prussia*.

The very low rate of marriage in *Italy* and in *Spain* forms a singular contrast to the high rate of *Austria*. In both the former States the marriage-rate appears to be on the decrease, it being very marked in *Spain*, where the figure had fallen from 16'5 p. 1000 of the pop. in 1862, to 12'5 p. 1000 in 1870, being a decline of not less than 4 p. 1000 in six years.

A survey of the average rates of marriages and of births, and the differences in them per 1000 of the pop., in the whole of the nine States, is given in the T. on p. 357, in which the countries are ranked according to the figures of the last column, expressing the comparative fecundity of the marriages.

It will be seen that while in 8 out of the 9 States there are 2 births and above to 1

marriage p. 1000 of the population, in the 9th, *France*, there are little more than three births to two marriages. "With a proportion of marriages rather above the average of the 9 States, *France* shows a want of fertility in them as striking as it is unique."

States.	Average Annual Birth-rate.	Average Annual Marriage-rate.	Difference between the Birth and Marriage-rates.
Austria	39'9	17'2	22'7
Spain	37'2	15'1	22'1
Italy	37'1	15'0	22'1
Prussia	37'8	17'3	20'5
Netherlands	34'5	16'0	18'5
Eng. & Wales.	34'9	16'8	18'1
Sweden	31'9	14'1	17'8
Denmark	31'6	15'9	15'7
France	26'1	16'0	10'1

Mr. Martin finally concludes his European survey as follows :

The only country among the 9 enumerated—and prob. the only State of Europe—showing scarcely any increase of pop. whatever, is *France*. As exhibited in the figures of one of the T., giving the average ann. birth-rates and death-rates, these are not very far from equal. The returns for the 22 years from 1853 to 1874—a period including some years of disaster, but likewise many years of the highest material prosperity, such as the country scarcely ever before knew—give the average ann. birth-rate at 26'1 p. 1000 of the pop., while the average ann. death-rate was 24'2 p. 1000. Thus the excess of birth-rate over death-rate in *France* was not more than 1'9 p. 1000, while in *England* it was 12'7 p. 1000. At the same time, the average ann. marriage-rate of *France* was above that of *Italy*, *Spain*, *Sweden*, and the *Netherlands*, and very nearly as high as that of *E.* and *W.* What has been said of the wealthy, highly intelligent, and highly prosperous nation in respect to her politics, holds no less true as to her vital statistics—*France* is the riddle of Europe.

Taking a general survey of the preceding facts. The increase of the pop. of *France* within the last century and a half has been comparatively less than in any other State of Western Europe. The natural increase of births over deaths amounted, when at its highest, between the years 1820 and 1830, to just over 220,000 p.a.; and during part of the decennial period 1850–60 sank down until in 1854 and 1855 the deaths exceeded the births. There was first a slight and then a rapid recovery during the next decennium; but in 1868 the surplus of births over deaths had again fallen to 65,503; while in the two years 1870 and 1871 the deaths exceeded the births—such excess amounting in 1870 to 103,394 and in 1871 to 444,889. In the year 1872 there was again a surplus of 172,936 births; and each succeeding year up to the present time shows an excess of births over deaths.

These facts are made more clear by reference to the T. on page 358. Much light is thrown upon the causes of these variations in the facts and authorities already quoted; but on minor points there is some conflict, as was to be expected on such a question.

[See Table on next page, and read with it the following notes :

Notes on T. on p. 358.—1842.—The figures down to this date are from the *Annuaire pour l'An 1844*, p. 134–5—reprinted in 6th Rep. Reg.-Gen. p. 478—except as to the last col., which is the difference between the two preceding cols. The orig. T. has various cols. which we have not used here.

1852.—The figures from 1842 to this date are drawn from Mr. Willich's paper in *Journ. of Statis. So. of Lond.* vol. xxi. p. 307.

1854.—The deaths exceeded the births by 69,318 this year.

1855.— ditto ditto 35,606 "

1870.— ditto ditto 103,494 "

1871.— ditto ditto 444,889 " Census deferred till following year in consequence of the war.

The remainder of the T. is drawn from the 37th Rep. Reg.-Gen. (Eng.), p. xcvi. except as to last col., which, as before, is deduced from the two preceding cols.—See sub-sections *Births, Deaths, Diseases, Marriages, Religious Orders*, etc.]

Registration of Births, Deaths, and Marriages.—It appears that records of births, marriages, and burials, were kept throughout France in the 17th century.

1773.—A work pub. by the Abbé de Expelly about this date says that from the year 1691 to 1700 inclusive, France contained 35,127 parishes, in which, within the above period, by an exact and complete abstract, taken from the public registers, there were 7,679,083 births, 1,807,891 marriages, and 6,784,724 deaths; and he continues the comparison for later periods. We have, however, already given T. under sub-sect. *Population*, which answer all purposes of reference.

1804.—Under the 96th art. of the *Code Civil des Français* ["Code Napoleon"] information of the death of every French soldier who dies out of France should be sent home by his regimental authorities, and entered on the civil regis. of his last known place of residence in France. This law was for many years very laxly executed.

1854–6.—During the Crimean War about 20,000 deaths of soldiers [and sailors] were regis. under the preceding regulation. This affected the death regis. of France in a corresponding degree.

FRANCE.—VITAL STATISTICS.

T. showing the Pop. of France, together with the Marriages, Births, and Deaths, and the excess of Births over Deaths, for a period of 58 years.

Years.	Population (enumerated).	Marriages.	Births.	Deaths.	Excess of Births.
1817	.....	205,244	944,125	748,223	195,902
1818	.....	212,979	913,855	751,907	161,948
1819	.....	215,088	987,918	788,055	199,863
1820	.....	208,893	958,933	770,706	188,227
1821	30,464,875	221,868	963,358	751,214	212,144
1822	.....	247,495	972,796	774,162	198,634
1823	.....	262,020	964,021	742,735	221,286
1824	.....	231,680	984,152	763,606	220,546
1825	.....	243,674	973,986	798,012	175,974
1826	31,858,937	247,194	993,191	835,658	157,533
1827	.....	255,738	980,196	791,125	189,071
1828	.....	246,839	976,547	837,145	139,402
1829	.....	248,796	964,527	803,453	161,074
1830	.....	270,900	967,824	809,830	157,994
1831	32,569,223	246,438	986,709	802,761	183,948
1832	.....	242,041	938,186	933,733	4,453
1833	.....	264,061	969,983	812,548	143,435
1834	.....	271,222	986,490	917,828	68,662
1835	.....	275,008	993,833	816,413	177,420
1836	33,540,910	274,145	979,820	771,700	208,120
1837	.....	266,554	943,349	878,701	64,648
1838	.....	273,174	961,476	846,199	115,277
1839	.....	266,890	957,740	780,600	177,140
1840	.....	281,998	952,318	816,486	135,832
1841	34,136,695	283,902	976,929	804,762	172,167
1842	.....	280,412	982,896	836,152	146,744
1843	.....	.....	983,107	811,435	171,672
1844	.....	.....	967,324	776,526	190,798
1845	.....	.....	992,033	754,701	237,332
1846	35,400,486	.....	983,473	831,498	151,975
1847	.....	.....	918,581	856,026	62,555
1848	.....	.....	948,748	844,158	104,590
1849	.....	.....	995,466	982,008	13,458
1850	.....	.....	962,972	775,653	187,319
1851	35,783,170	.....	979,907	817,449	162,458
1852	.....	.....	965,080	810,695	154,385
1853	.....	280,609	936,967	795,607	141,371
1854	.....	270,896	923,461	992,779	note
1855	.....	283,335	902,336	937,942	"
1856	36,039,364	284,401	952,116	837,082	115,034
1857	.....	295,510	940,709	858,785	82,024
1858	.....	307,056	969,343	874,186	95,157
1859	.....	298,417	1,017,896	979,333	38,563
1860	.....	288,936	956,875	781,635	175,240
1861	37,472,732	305,203	1,005,078	866,597	138,481
1862	.....	303,514	995,167	812,978	182,189
1863	.....	301,376	1,012,794	846,917	165,877
1864	.....	299,579	1,005,880	860,330	145,550
1865	.....	298,838	1,006,753	921,887	84,866
1866	38,067,094	301,390	994,288	885,559	108,729
1867	.....	299,521	1,002,621	866,366	136,255
1868	.....	301,197	984,020	918,517	65,503
1869	.....	303,482	948,526	864,320	84,206
1870	.....	223,705	943,515	1,046,909	note
1871	note	262,476	826,121	1,271,010	"
1872	36,102,921	352,754	966,000	793,064	172,936
1873	.....	321,238	946,354	845,588	100,766
1874	.....	300,829	953,510	784,856	168,654

1857 The Eng. Reg.-Gen. in his 18th Rep. pub. this year, says :

The present arrangements for the *civil regis.* of the deaths of soldiers and seamen in foreign parts are unsatisfactory, both in France and in England. The deaths of French soldiers abroad are improperly confounded with the deaths in France; whereas they should appear in the gen. regis. under a separate heading, and be compared with the strength of the army abroad. At the same time the aggregate deaths should be taken into account, and set off against the aggregate births.

Religious Orders.—The prevalence of religious orders in any country has to be noted by the statistician, at least where these orders or any considerable section of them practise celibacy, either under vows or voluntarily, as is the case in all Roman Catholic communities.

1861.—France reckoned 86 archbishops and bishops, 189 deans and sub-deans (*vicaires généraux*), 711 canons and prebendaries, 3517 vicars (*curés*), and 30,190 country vicars and incumbents (*desservants*). By adding curates (*vicaires*), bishops in *partibus infidelium*, *chanoines-évêques*, *chaplains des derniers ordres*, and non-Catholic clergy (*ex. gr.* 948 Protestant pastors), the number of those members of the secular clergy whose standing is recognized by the State under the Concordate mounted up to 43,557. A further addition of the supernumerary priests, deacons, and sub-deacons paid by vestries in populous parishes, the prison and college chaplains and unattached priests, brought the aggregate number of persons directly or indirectly living by religious professions to 79,584 men and 124,893 women.

Thus far comparative accuracy is secured; but when conventual and monastic establishments are tested, the figures of lay and of clerical tellers are much more at variance. In 1861, 16,815 monks, friars, and brothers occupied 2158 houses belonging to 86 different communities; 88,091 nuns and sisters were inmates of 12,239 houses, and belonged to 279 different orders or communities. So at that date 365 communities, cloistered or free, flourished in France; their 14,397 establishments harboured 104,906 religious persons, who exceeded by upwards of 60,000 the whole body of secular clergy recognized by the State. The seculars and regulars of both sexes make up a grand total of 309,382 persons.

1874.—M. Jung, in his work *France et Rome*, pub. this year, in the main confirms these figures.

About this date M. Legoyt, then Sec. of the Statistical So. of *Paris*, estimated that in the seven years 1852-59 the Brotherhoods received gifts and donations amounting to 927,882 fr. (£37,000 in round numbers), while the Sisterhoods were presented with a sum of 9,025,577 fr. (£360,000), of which 5,789,755 fr. came by donations and 3,232,824 fr. by bequests. In Jan. 1857, the real estates owned by those monastic and conventual bodies were valued at 105,370,000 fr. (£4,200,000), yielding an ann. income of 3,641,000 fr. (£186,000); the acreage of their landed property, which was 9185 hectares (23,000 acres) in 1850, had grown into 14,600 hectares (35,000 acres) in 1859, thus nearly doubling itself in ten years. If this rate of increase has been kept on, religious communities must now own some 30,000 hectares (75,000 acres) of land in France, though only 80 years have elapsed since the confiscation of *Les biens du Clergé*.

Since that date a very large increase has occurred in all the preceding items; but no exact details are presented.

Sickness.—In the *Annales d'Hygiène* have appeared some excellent papers by M. Benoiston de Châteauneuf, and M. Villermé, on the comparative mort. of the rich and poor; and the results have been applied with much advantage to purposes of F. Sos. in France.

1809.—M. Mourgue, having devised a plan for the relief of the working classes, in connexion with a savings fund and provision for old age, directed his inquiries to the number of sick persons received in the hospitals of *Paris*, compared with the total labouring pop.; and the result was 7 days' sickness for each individual as the mean of 5 years.

At a later period M. Gérando concluded that, for each inhabitant of *Paris*, the average sickness was 8 or 9 days p. ann.

1823.—The Rep. of the Philanthropic So. of *Paris* for this year laid it down that sickness was constant among the members of Friendly Sos. in France at that date, at the rate of 1 sick member for 25 in health. There was prob. some error here, as this would yield a rate of sickness nearly or perhaps more than twice as great as that in England at the same date.

1852.—It was in this year that M. Hubbard pub. the results of his investigations into the mort. and sickness of certain of the Friendly Sos. in France which we have already referred to under sub-heading *Friendly Sos.*; and which will be dealt with in detail under general title FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF.

Suicides.—The question of suicides has an important bearing on V. Statistics. The returns in regular succession would be of great interest, more especially as illustrating the influence of political changes upon the human faculties [see sub-sect. *Insanity*]. But, so far as we are aware, these statistics cannot be obtained for any lengthened period.

1826.—The first returns of suicides in France are said to have been obtained this year, when they numbered 1739; in 1831 they were 2084; in 1836, 2340; in 1839, 2747; in 1841, 2814; in 1845, 3085; in 1847, 3647; in 1852, 3674; in 1860, 3920; in 1869, 5114.

1872.—The events of the war and the siege of *Paris* caused the attention of statisticians to be directed to the returns of suicide at this period; and the following details were obtained. The suicides of the year in the whole of France were 5275, being 161 more than that of 1869, but 272 less than that of 1868. The Department of the Seine took as its share one-seventh (774) of the total number. More than three-quarters of the suicides

(4110, or 78 in the 100) were of the *male* sex—that is, 15 to the 100,000—and 1165 (or 22 in the 100) were *females*—that is, 6 to the 100,000 of pop. In regard to age, the distribution is as follows: Minors of 21 years, 206 (4 in the 100,000); of ages from 21 to 40 years, 1369; (13 in the 100,000); of ages from 40 to 60 years, 2199 (25 in the 100,000); of ages above 60, 1530 (37 in the 100,000). The returns did not give the specific ages of 71 suicides. In spite of police and judicial investigations, it was impossible to ascertain the domestic state of 174 suicides. Of the others, 1689 were unmarried (22 in the 100,000); 2496 married (17 in the 100,000), of whom 832 were without children, and 916 widowers (31 in the 100,000), of whom 312 were childless. Of 5225 suicides, nearly six-tenths, 3084 (59 in the 100) resided in the rural districts (12 in the 100,000), and 2141 (41 in the 100) in the urban communities (19 in the 100,000). During spring, suicides are most frequent (1512); in summer, 425 occurred; in winter, 1279, and in autumn, 1059. 2312, or 44 in the 100, of the suicides had recourse to strangulation; 1463, or 28 in the 100, to drowning; 581 to firearms; 378 to asphyxia from fumes of charcoal; 206 to pointed and cutting instruments; 107 to poison, etc. The causes of 4716 suicides are thus ascribed: To want and reverse of fortune, 453; Domestic trouble, 732; Love, jealousy, debauchery, misconduct, 315; Degradation, resulting from drunkenness, 513; Physical suffering, 629; Various troubles, 473; Diseases of the brain, 1568; Consciousness of having committed capital crimes, 33. Total 4716.—*Journal des Assurances*.

1874.—The judicial return of suicides in France for this year gave the number of 5617—the highest which had been recorded; 4435 (79 p.c.) by men, and 1182 (21 p.c.) by women. Of these, 29 were below 16 years of age, and 1599 over 60. As usual, they were more frequent in spring (31 p. 100) and in summer (27 p. 100) than in winter (23 p. 100) and in autumn (19 p. 100).

1875.—Suicide in the army had become a serious feature, and the Commander-in-Chief of the 15th Corps d'Armée issued an order condemning it in severe terms. "The soldier," he says, "who puts an end to his life is guilty of an act of cowardice. His life belongs to God and to his country." The General decided that every soldier who committed suicide should be buried in the night without military honours and without an escort.

This subject will be considered in further detail under general title SUICIDE; where will also be investigated the truth or otherwise of a prevailing notion that suicides are less frequent in *Roman Catholic* than in *Protestant* countries.

Towns.—The pop. of France, like that of most other European countries, is constantly agglomerating in towns. In 1846 the rural pop. constituted 75·58 p.c. of the total; and the urban 24·42 p.c. In 1856 the rural had fallen to 72·69, and the urban risen to 27·31 p.c. In 1866 the rural was 69·54, and the urban 30·46 p.c. Finally the Census of 1872 showed the rural pop. to be 68·94, and the urban 31·06 p.c. of the entire pop.

The total urban pop.—defined in the census returns as living in cities and towns of not less than 2000 inhabitants—numbered 11,214,017, and the total rural pop. 24,888,904, at the Census of 1872. The following T. gives the pop. of the 4 principal towns of France at 3 periods:

Towns.	1861.	1866.	1872.
Paris	1,667,841	1,799,980	1,794,380
Lyons	318,803	323,954	323,417
Marseilles	260,916	300,131	312,864
Bordeaux	162,750	194,241	194,055

According to the Census of 1876 there were then 73 towns having a pop. exceeding 20,000 inhabitants, 108 with a pop. of from 10,000 to 20,000; 309 with a pop. of from 5000 to 10,000; 249 with a pop. of from 4000 to 5000; and 581 of from 3000 to 4000—total 1320 towns.

See sub.-sect. *Population* for details as to the influence of town life upon the progress of the pop.

Vaccination.—1813.—A Rep. this year, pub. by the Imperial Institution of France, stated that 2,671,622 subjects had been properly vaccinated, of whom only 7 had afterwards taken the smallpox!

We have no later returns at hand.

Warfare, Influence of.—The effect of warfare upon a country is felt in many ways. We have seen some of its influences upon the progress of the pop. [*V. Sta.* sub-sec. *Pop.*] Its material prosperity is variously affected.

The *Fire Ins. Cos.* of Paris in 1870 received £69,079 less in prems., and paid £179,518 more in claims.

The returns of the *Life Cos.* of France show a very serious falling off in their bus. during the years 1870-1.

1870-3.—The monetary cost of the war and German occupation during these years was stated in a budget laid before the National Assembly to have been £371,515,280!

1874.—A law was passed for estab. a commission to inquire into claims upon the Gov. resulting from the war. The commission met in Oct. and received 9950 applications. Of these, it had by the end of the year investigated 3245; 185 claims had been admitted, while 1393 were rejected on account of the damage being indirect, or of its not being within the categories specified in the law of July, or of its having been already compensated.

Warfare, Ins. against the Consequences of.—In 1870 an asso. was founded in France called *The Repairer of the Invasion*, "being a society for mutual assurance against burning, devastation, robbery, pillage, requisitions of hostile commanders, riots and other risks of war, which ordinary pol. did not cover." This organization had its headquarters at Rouen, and had agents in all the cantons of France not then overrun by the Prussians.

We do not know what success attended the enterprise. [WARFARE.]

SUPPLEMENT TO THE PRECEDING.—While this art. has been in the hands of the printer, supplemental information has been obtained which it is desirable to give here, in view of completeness.

FIDELITY INS. [*Garantie Ins.*].—It is a remarkable fact that up to the present time [1877] no asso. for insuring the fidelity of persons engaged in positions of trust has existed in France. This omission is now about to be remedied, by a co. to be formed under the auspices of M. Reboul, aided, we have reason to believe, by M. Charles de Guerle. We wish the enterprise every success.

FIRE INS. (History, etc.).—M. De Courcy has recently discovered 3 Charters granted by the National Council under Louis XVI. attested by the signature of Baron Breteuil. The first two are dated respectively 20th Aug. and 6th Nov. 1786, and relate to Fire Ins. As to the third, we shall speak of it under *Life Ins.*

1786.—The Charter bearing date 20th Aug. this year, granted an application of Messieurs Perier, frères et Cie., for permission to estab. a guarantee fund of 4,000,000 fr. for the ins. of houses against fire. The object sought, therefore, was exclusively to insure property forming part of the realty. Beside this special cap., all the apparatus, fixtures and personal property of a water co. were pledged as collateral security for the ins. obligations, so that, in fact, it was the water co. which undertook ins. against fire.

The enterprise had hardly been started before competition was attempted. Adrian Labarthe founded another co. [? under the Charter of 6 Nov.] of which the express object was the ins. not only of houses, but also personal property. He stated that he was supported by more than 600 property owners. The capital stock of his co. was fixed at 8,000,000 fr., and was divided into 16,000 shares of 500 fr. each. The insured had a prior right to subscribe for shares. These 8 million francs did not consist of a guarantee cap. of which only a quarter or a fifth is paid in, as in companies now-a-days; but were handed over in actual funds of solid value, the evidences of which were shut up in an iron chest that was deposited in the Council-house in Paris—one of the 3 keys with which the chest was provided being placed in the custody of the head of the Corp. of Merchants of the city.

The rate of the premis. [of the last-named co. ?] was fixed at 10 sous p. 1000 fr., only, however, on houses and buildings constructed of stone. On other buildings, and movables in general, the amount of the premis. was to be determined by the agreement of the parties. The office of the Co. was in the Rue Richelieu, opposite the Royal Library, only a few steps from the building in which, 30 years later, the *Cie. des Assurances Générales* was estab. The 7th art. of the Charter provides that a quarter of the net ann. profit, after payment of int. on the cap. stock, should be placed at the disposition of the Gov., and be applied for paying the expense of estab. a fire co. [Brigade]. This was not an exaction or imposition of the Gov., but a voluntary offer made by the founders of the Co., who wished to appropriate part of their net profits towards the organization of a trust-worthy fire department.

The 9th art. [we are not told of which Charter] is as follows:

His Majesty orders that the Co., previous to the payment of every dividend, print and publish a statement of its receipts, disbursements, profits, and of all its operations, to the end that both shareholders and policy-holders may, at all times, have the means of obtaining a full knowledge of the Co.'s real position.

This art. in substance requires a publication of the Co.'s accounts, a requisition which has generally been supposed to be of much more recent origin. In fact, the article goes further, it requires the Co. to deliver, at its own expense, a copy of the statement to each pol.-holder. This is more even than is required by modern legislation. (See sub-heading *Regulations*.)

[We reproduce the above from a trans. of an art. in the *Deutsche Versicherungs Zeitung*, which appeared in the *Ins. Times* of N.Y. May and June, 1877. It is prob. that the confusion noticed arises in the subsequent treatment, and not with M. De Courcy.]

1835.—Mons. Th. Barrois pub. in Paris: *Essai sur l'Application du Calcul des Probabilités aux Assurances contre l'Incendie*, etc.

1877.—There is now being founded *La Foncière Fire Ins. Co.*, with a cap. of 10 million fr. (£400,000). It proposes at starting to absorb the *Cie. la Paix* (Fire).

FIRE INS. PRACTICE.—*Commission to Fire Agents.*—Most of the fire ins. in France are effected for terms of 10 years; and a high brokerage commission is paid for the

introduction of the bus.—ranging from 150 p.c. upwards on the first year's prem. This tells very severely against young fire offices, and in fact gives a monopoly to the older ones. Some of the younger cos., however, now seem to be trying to outbid in this regard the older ones.

INS. JOURNALS.—The following were omitted in our previous summary :

Bulletin de l'Agence Financière des Assurances, 1873, pub. by M. Thomereau on the 15th of each month. It gives the prices of shares in ins. asso., also the dividends paid, and other useful details.

La Semaine, 1870.—A weekly journal of history (chroniques), agriculture, and assu. In it appear many details of interest regarding ins. cos., and also some excellent art. on the subject. It is pub. at Poissy (Seine-et-Oise). Editor, Mons. E. Mignot.

LIFE INS.—The art. above quoted proceeds to state that the Co. of 1786 had hardly been organized when its founders determined to unite with the organization a new branch of ins. and to raise for the purpose add. cap. to the amount of 8 million fr. They received permission to assume the name of *Compagnie Royale d'Assurance*, a new act of incorporation was issued to them dated Nov. 3, 1787, and the exclusive privilege of transacting life ins. bus. was granted them, only, however, for the period of 15 years. No monopoly of fire ins. bus. was created. The founders used the following language in regard to their exclusive rights :

Although competition is in general beneficial to the public, inasmuch as it tends to reduce prices, the principle does not apply to Life Ins. bus. Life ins. is entirely new in France, its success depends upon public confidence, and public confidence cannot come into existence unless the business has certainty for its foundation. No certainty attends Life Ins. operations without a number of policies large enough to prevent their being the sport of chance. Free competition would render, for a long time, the bringing together of such a number hopeless. The continuance of the exclusive privilege is, however, limited to 15 years.

Again, the promoters showed a full appreciation of the nature of the bus. :

The Co.'s attention is invited to the important difference that exists between the funds paid into its treasury and money which is placed at interest. If the Co. holds out too large promises, it will soon become unable to fulfil the purpose for which it was organized. For people of wealth, and for those in moderate circumstances, life ins. should be viewed as a sacrifice, rather than as being a source of profit. It is a sacrifice, however, that turns out in hundreds of cases to be a great gain, no matter what the opportunities enjoyed for making other investments.

The Decree which was ultimately issued in favour of the promoters we have already given in its proper place—*Life Ins.* (France), 1787.

[We have to tender our thanks for assistance rendered, first, and principally, to Mr. Geo. W. Kilford, who has readily obtained for us publications and documents of value, as also information on various points ; to Mr. A. J. Cook, who has given us the benefit of his knowledge of the French Ins. newspapers ; and to M. Bertillon for furnishing us with his *Mort. T.*, and corrections thereto.

We regret to observe that in one or two instances we have, by inadvertence, substituted the feminine for the masculine gender. We ask pardon of our polite, but susceptible, friends !]

FRANCIS, ANDREW.—Sec. of *Church of England* since 1873. Mr. Francis received his ins. training in the *Alliance*. In 1850 he became Sec. of *Britannia Life*, and remained in that position until the amalgamation of the Co. in 1865. He then became Sec. of the City branch of the *Briton*. In 1869 he became Sec. of the *Gt. Britain Mutual*, and remained in that position until he accepted his present appointment. Mr. Francis takes an active part in educational matters in the City, especially in connexion with the *Haberdashers Co.*

FRANCIS, D. J. T.—Pub. in 1853 : *Change of Climate as a Remedy in Dyspeptic, Pulmonary and other Chronic Affections*. [CLIMATE.]

FRANCIS, H. D.—Was Sec. in Lond. of *Experience Life* for several years prior to its amalgamation in 1850.

FRANCIS, JOHN.—Late Sec. of Bank of England; and author of several well-known works, among which : *Annals, Anecdotes, and Legends : a Chronicle of Life Ins.*, pub. in 1853. This is a most interesting book ; but it is written in a style too popular for the subjects treated of. As a consequence the reviewers were very severe upon it, going so far as to state that "what was true was not new, and what was new was not true." But the reviewers were mistaken. Mr. Francis has usually very good authority for the statements he makes. His error lay in not quoting or making reference to his authorities. We occasionally quote from its pages in this work.

An ed. was printed in the U.S. about 1863, edited by Mr. Smith Homans.

FRANCIS, JOHN.—Sec. of *Provincial Life (Wrexham)* since 1875. He was previously chief life clerk, having passed through all the departments of the office in a course of 20 years' service. We wish Mr. Francis every success in his new position. There is scope for his abilities.

FRANKALMOIGN.—In Law, a tenure by spiritual service, where an ecclesiastical corp., sole or aggregate, holds land to them and their successors of some lord and his heirs, in free and perpetual alms. The *Hospital of Noble Poverty*, near Winchester, is an instance of this kind of tenure. Donations in frankalmoign are now out of use, as none but the Sovereign can make them. They were especially exempted from the operation of stat. 12

Charles II. c. 24 (1660), which abolished military tenures. It differs from tenure by divine service, in that the latter required the actual performance of certain of such services.

FRANKFEE.—Freehold lands exempted from all services, but not from homage.

FRANKFORT-ON-THE-MAIN.—An ancient and important "Free City" in Central Germany. The government of the city has long been a model of municipal wisdom. The police office (*Das Polizei Amt*) embraces (*inter alia*) the following functions: Regulating the cleansing of the streets. The inspecting the quality of every kind of food, and the necessities of life (*Lebensbedürfnisse*); and preventing extortionate charges for the same. The preservation of life and property. The fire engine estab. is under the control of the police: the Junior Burgomaster having especial care of it. The watch for fires is kept from the central tower. On the breaking out of a fire in either of the 14 divisions of the city, the engines are despatched, and the city militia assembled to preserve order. In consequence of the narrowness of the streets in the orig. city, many serious fires have occurred. The last was the burning of part of the ancient Cathedral of St. Bartholomew (founded 1315, and wherein the coronation of the Emperors of Germany takes place) 14 and 15 Aug. 1867. [FIRES, GREAT.]

In vol. vii. (1844) of the Journ. of the Statistical So. of Lond. will be found a paper: *The Statistics of the Free City of Frankfort-on-the-Main*, by Lieut.-Col. William Sykes, wherein much valuable information will be found regarding the Vital Statis. of the city.

The pop. in 1867 was 78,277, since which it has very largely increased.

Fire Ins.—The hist. of fire ins. in connexion with this city is interesting and instructive. Through the courtesy of Herr J. Albert Varrentrapp, a name which has been long and favourably associated with ins. interests in this city, we are enabled to present some details not previously made public.

1807.—When this city formed part of the Grand-Duchy of Frankfort, a system of mut. fire ins. by the State existed. Buildings could be insured; but it was not compulsory to insure, or to continue insured. As, however, partly by custom, and partly by law, mortgage advances were not obtainable on buildings not insured, and as the facilities for insuring by means of independent cos. were very small, most of the buildings were insured in the State Bureau. The losses which arose during the year were paid by means of advances obtained during the year (hence the charge for int. in the accounts); and at the end of the year accounts were made up, and an assessment by way of contribution on the property insured was levied. All buildings paid an equal rate, whether used as factories, or simply as private dwellings, except buildings constructed of timber, or covered with thatch. These paid $\frac{1}{4}$ extra. No record of the monetary results of the operation are now available.

All collections by way of charity [FIRE BRIEFS] for those whose houses had been burned down were prohibited from this date.

1815.—The Grand-Duchy of Frankfort having ceased to exist in 1814, the Free City of Frankfort, and with 8 villages around it, were formed into an independent State. A scheme of State Ins. was this year inaugurated, and in 1817 was sanctioned by the law. Again no distinction was made between private houses and buildings used for industrial operations; but the extra $\frac{1}{4}$ p.c. was charged for buildings of wood, or covered with straw; and there was no compulsion to insure. Most of the property in the city was insured, and the fund became known as the *Frankfurter Brand-Versicherungs Anstalt* [Frankfort Fire Ins. Institution].

1843.—A proprietary co. called the *Frankfort Fire Ins. Co.* was founded. It insured dwelling-houses of the first class at $\frac{1}{4}$ p. mille [1000], or, taking into account the discount allowed on 5 years' pol., at about $\frac{2}{3}$ p. mille. This Co. soon absorbed the *Badish Phoenix*, and thenceforth adopted the name of the *Frankfort Phoenix*, by which it is still known. Competition once commenced, other cos. founded agencies, and the result was that the State organization began gradually to lose its best risks.

1857.—A new State law was enacted, designed to meet the circumstances of the competition now experienced. All theatres, gunpowder mills, and certain other factories, were excluded from ins. by the State; as also certain houses deemed of hazardous occupation. The risks to be accepted were divided into the following classes: A. *Within the City and its Territory*, viz. 1. Buildings in stone, or in stone and framework, separated from the adjoining by stone partition walls, or not adjoining other buildings. 2. Buildings in stone, or in stone and framework, separated from the adjoining ones by partition walls not totally in stone; buildings not adjoining, the walls of which were not totally in stone or stone framework. 3. All other buildings. Hazardous coverings, i.e. wood or straw, were prohibited by law. B. *In the Villages and their Territory*—sub-divisions the same as under A.

The rate for buildings was as follows: A 1, 15 kreutzers p. 1000 fl.; A 2, 18 kr.; A 3, 21 kr. B 1, 18 kr.; B 2, 21 kr.; B 3, 24 kr. p. mille. It was regarded by practical ins. men that the difference in rate between the different classes was insufficient; and there was no power to accept risks at rates other than those named. The law also limited the maximum contribution to twice the amount of prem. fixed by law. A new valuation of the property in the State was made in view of the requirements of this law;

but ins. was not compulsory. In regard to mortgage transactions, the new law offered greater facilities than before. The affairs of the new organization were managed by State officials down to 1867; and afterwards by the city magistrates.

In this same year 1857 there was founded the proprietary co. called the *Providentia*. This competed, successfully, for the better class of risks; and the agents of other cos. joined in the competition.

1867.—From the time of the passing of the new law, 10 years previously, the bus. of the State project had begun to fall off, and its ann. figures no longer represent the increase of the property of the city. But now occurred the events which led to its final overthrow. In Aug. of this year the fire occurred in the Cathedral, resulting in claims as follows: On the Cathedral, 133,200 fl.; on the school building adjoining, 23,000 fl.; on 18 houses damaged on same occasion, 45,851 fl.; total, 302,051 fl.

Three other considerable fires happened the same year, resulting in claims respectively of 19,000 fl.; 61,552 fl.; and 33,450 fl.; total 114,002 fl. These, with some small damages, brought up the total loss of the year to 380,753 fl. The consequence was, that after paying the maximum contribution permitted by the law of 1857, the debt against the ins. fund was very large. This remained as a charge against and upon the properties insured, to be discharged in future years, by means of the contribution of the double ordinary rate. The sums ins. fell off rapidly—the property still remaining liable to contribute to the losses of 1867. Many of the owners, however, paid up their share of this liability at once, and so freed their properties. And a law was passed that in the case of property sold, the sum charged against it was to be paid off. By those means the debt is now nearly paid off, and is expected to be finally wiped out in 1878.

1869.—The remaining fire risks insured by the State were this year re-insured; and so the State scheme of ins. ended in disaster, as prob. all such plans of Municipal or State Ins. in the end will.

While the fires of 1867 ostensibly brought matters to a crisis, a careful study of the figures in the following T. will show that it would probably have died out without, or independently of the occurrences of that year. The rate of contribution between the years 1815 and 1857 had averaged $\frac{1}{2}$ [12] p. mille, the contributions for the 9 years 1858-66 had averaged nearly $\frac{1}{2}$ [45] p. mille. The rate charged by the proprietary cos. (after allowing commission on 5 years pol., averaged about 40 p. mille.

The following T. shows the financial results in more complete detail for the two periods involved:

Table showing financial results of Frankfort State Fire Ins. Co. for Buildings for a total period of 55 years.

Year.	Sum insured in florins.	Amount of claims admitted in florins.	Total amount of expenses in florins, including claims.	Contribution per 100 fl. in Kreuzers.	Year.	Sum insured in florins.	Amount of claims admitted in florins.	Total amount of expenses in florins, including claims.	Contribution per 100 fl. in Kreuzers.
1815	28,305,630	4,035	4,522	1	1844	54,839,550	1,570	34,239	4
1816	29,150,285	—	—	—	1845	54,624,350	28,220	—	—
1817	31,000,490	75	—	—	1846	54,881,305	10,000	11,984	14
1818	31,621,085	400	31,200	6	1847	55,473,040	24,184	25,907	24
1819	33,181,115	26,701	—	—	1848	56,447,700	0,173	—	—
1820	34,423,245	1,204	—	—	1849	56,822,730	812	0,634	1
1821	35,815,005	184	—	—	1850	57,155,440	5,275	—	—
1822	37,957,210	850	23,154	32	1851	57,807,375	537	0,616	1
1823	37,966,160	16,605	—	—	1852	58,850,325	12,477	14,129	14
1824	39,076,185	805	—	—	1853	59,330,325	8,380	10,269	1
1825	39,878,770	50	—	—	1854	62,005,010	2,771	—	—
1826	40,036,270	2,415	18,806	24	1855	—	24,378	29,194	3
1827	41,706,570	11,730	—	—	1856	63,070,155	10,344	10,511	1
1828	42,861,280	9,175	1,002	14	1857	61,012,210	23,553	25,159	24
1829	43,307,160	50	—	—	1858	71,204,445	2,793	20,141	1
1830	43,967,285	1,984	36,744	5	1859	73,374,225	60,123	62,526	2
1831	44,604,160	11,377	—	—	1860	73,007,025	14,216	17,782	1
1832	45,192,085	23,643	28,373	4	1861	65,136,630	34,145	37,023	2
1833	45,552,700	727	—	—	1862	64,088,010	21,810	28,590	2
1834	45,927,975	8,020	12,208	14	1863	68,168,145	21,258	24,504	14
1835	46,565,015	1,169	—	—	1864	72,022,605	45,200	50,240	2
1836	47,630,320	3,957	11,780	14	1865	74,557,630	55,023	62,475	2
1837	48,020,770	17,654	20,709	24	1866	75,746,445	75,201	81,074	2
1838	50,297,150	2,401	—	—	1867	72,660,335	320,750	320,957	2
1839	51,260,600	14,998	23,342	24	1868	26,267,160	5,179	14,636	2
1840	52,351,150	1,000	—	—	1869	4,077,400	re-ins.	—	—
1841	53,264,800	11,152	17,746	2					
1842	54,670,785	14,998	21,449	24			1,035,302	1,187,288	774
1843	55,681,585	9,212	16,007	14					

[1 florin = 12. 8d. sterling or 12 fl. = £1 sterling. 60 kreutzers = 1 florin.]

Notes to Table.—From 1832 to 1844 the Co. paid a contribution for the fire engines of the town, amounting to a total of 25,739 fl. This sum is included in the total amount of expenses given in the T. (col. 4).

The sums in cols. 3 and 4 are given neglecting the fraction of florins (the kreutzers); the addition of

the cols. therefore does not agree with the numbers given. The total expenses (col. 4) include also the interest paid on the sums raised for paying the claims. In periods when claims were light, assessments were made only in intervals of several years. The contribution was 56 kreutzers for 100 florins in 43 years: this makes per 1000 florins and per year about 0.214, or little more than $\frac{1}{5}$ per mille.

The comparatively high amount of expenses in 1858 arose from the fact that a new valuation of the buildings was made in that year; the outlay for this item alone was 16,249 fl. 10 kr.

FRANKLIN, DR. BENJAMIN, Author, Printer, Philosopher, Negotiator, Promoter, etc.—He was born in Boston, Mass., in 1706. Regarding the share which he had in the intro. of ins. into America, there is some controversy. Into this we do not propose to enter. We confine ourselves to the facts in his biography bearing upon Ins. topics. His influence in this matter was prob. felt rather than seen.

1725.—The first book pub. in America relating to ins. was printed by Franklin; and it was the first book printed by him. The title was: *Ways and Means for the Inhabitants of Delaware to become Rich*. The reputed author of this little book was Francis Rawle; and it advocated the estab. by the legislature of an ins. office in Philadelphia for the purpose of providing marine ins. for the merchants. Further details will be given in our hist. of MARINE INS. at this date. The book was pub. by S. Keimer, in Phila. Of two copies known to be in existence a few years since—one in the British Museum; the other in the Loganian Library in Phila.—neither can now (1877) be found.

1751.—He pub. in Phila.: *Observations on the Increase of Mankind, Peopling of Countries*, etc., wherein he fully illustrated the influence of the natural procreative power to overcome all merely temporary and incidental obstacles to the growth of pop.: a subject upon which Mr. Corby Morris wrote in England during the same year; and which Dr. Halley had referred to in his *Further Considerations on the Breslau T. of Mort.* in 1693.

This short essay is an excellent specimen of the penetrating sagacity, and compressed and clear style, for which its eminent author was so remarkable.—M'Culloch, *Lit. of Pol. Economy*.

1752.—On the 18 Feb. this year, the *Pennsylvania Gazette*, a newspaper pub. by Franklin and David Hall, contained an adv. as follows:

All persons inclined to subscribe to the Articles of Ins. of Houses from Fire, in and near the City, are desired to appear at the Court House, where attendance will be given to take in their Subs. every seventh day of the week, in the afternoon, until the 13 April next, being the day appointed by the said articles for the electing 12 Directors and a Treasurer.

This was the beginning of the now historical *Philadelphia Contributionship for the Ins. of Houses from Loss by Fire*. Among the first names to the D. of Sett. are those of James Hamilton, the "Lieut.-Governor of the Province, under the Proprietors," and of Benjamin Franklin, then a private citizen. The name of the latter also stood at the head of the list of Directors. For a short period he took an active share in the management of its affairs. We do not find trace of his name in connexion with any other ins. enterprise.

He died 17 April, 1790, aged 84.

FRANKLIN, SIR JOHN, Arctic Navigator, etc.—He was a pupil of the late Mr. Griffith Davies. "Amongst others whom he had the honour of teaching was the celebrated Sir John Franklin, who, after many years of service at sea, came to him to perfect himself in some of the higher branches of the science of Navigation. Mr. Davies entertained the most profound regard for that eminent navigator; and in conversation whenever the melancholy loss of Sir John Franklin was alluded to, he would invariably speak of him as one of the most unassuming and gentlemanly men that he had ever met with."—Barlow's *Memoir of the late Griffith Davies*, *Assu. Mag.* vol. v. p. 343.

FRANK-MARRIAGE.—A species of entailed estates, now grown out of use, but still capable of subsisting. When tenements are given by one to another, together with a wife, who is a daughter or cousin of the donor, to hold in frank-marriage, the donees shall have the tenements to them and to the heirs of their two bodies together, *i.e.* in special tail. For the term *frank-marriage, ex vi termini* (says Littleton), both creates and limits an inheritance, not only supplying words of descent, but also terms of procreation. The donees are liable to no service except fealty, and a reserved rent would be void until the fourth degree of consanguinity be past between the issues of the donor and donee, when they were capable by the law of the Church of intermarrying.

FRASER, JOHN.—Man. and Act. of *Life Asso. of Scotland* since 1847. Was trained to the bus. of life ins. in the *Standard* under Mr. W. T. Thomson, which office he entered as an apprentice in 1836, and became Assist. Sec. The great success of the *Life Asso. of Scotland* is almost entirely due to Mr. Fraser. In its earlier days, and before his advent, the Co. had suffered from mismanagement.

FRASER, THOMAS.—Sec. of London branch of *Life Asso. of Scotland*, since 1848. He entered the *Standard Life*, in Edin., in 1841. A few years later he opened the principal agencies in Ireland for that Co. In 1846 he was appointed cashier of the London branch of the same Co. Two years later he was engaged in founding the London branch of his present Co., and his efforts have been attended with a very large measure of success. After 36 years of most active business life, Mr. Fraser still remains a young and vigorous man.

FRASER, WILLIAM.—Act. and Accountant, Edin.; and projector of the *Scottish Provident Life*, under its orig. title of the *Scottish Economic*. He had a very considerable practice for many years in connexion with friendly sos. and other provident inst. in Scotland. His publications are various.

1824.—*Statement submitted for the Consideration of the So. of Journeymen Printers in Edinburgh.*

1826.—A pamph.: *Remarks on the Constitution and Errors of F. Sos.; with the Laws of the Edinburgh Compositors So. instituted 3 June, 1824, upon the Principle recommended by the Highland So. of Scotland; and an Abstract of the Acts of Parl. relative to F. Sos.*

1827-8.—He contributed to the *Edin. New Philosophical Journal* a series of papers: *On the Hist. and Constitution of Benefit or F. Sos.* This year also he drew up: *Case of the Forfeited Members of F. Sos.*, in which he raises the important question of return of subs. in such cases. Each of these will be duly noticed in our art. F. SOS., HIST. OF.

1831.—He contributed to the (Scottish) *Quarterly Journal of Agriculture* in Edin. a paper: *Remarks on the Principles and Defects of the present Asso. for Life Assu., with a view to the preliminary arrangements for instituting the Scottish Economic Life Assu. So.* The project afterwards matured as the *Scottish Provident Life*. [LIFE INS., HIST. OF.]

FRATERNITIES.—See GILDS.

FRAUD.—In Law, the general designation for any species of deceit in contracts, either by suppression of truth or assertion of falsehood. Prob. the most complete definition of it is that given by Forbes: *Dolum malum esse omnem calliditatem, fallacium, machinationem, ad circumveniendum, fallendum, decipiendum, alterum adhibitum.*—Vide Story's *Commentaries on Equity Jurisprudence*.

Fraud, in its ordinary application to cases of contracts, includes any trick or artifice employed by one person to induce another to fall into, or continue in an error, so that he may make an agreement contrary to his interest; and it may consist in misrepresenting or concealing *material* facts; and may be effected by words or actions.

Fraud, both in Law and Equity, when sufficiently ascertained and proved, avoids a contract *ab initio*, whether such fraud be intended to operate against one of the contracting parties, or against the public. At Common Law the question of fraud is for the jury.

Mere lapse of *time* does not condone fraud. It runs against all time, and will vitiate a contract in any of its stages.

An *intention* of committing fraud, entertained at the time of entering into a contract, but not afterwards carried into effect, does not vitiate. Neither does mere *suspicion*, leading to no certain results, estab. fraud, either in Law or Equity. The evidence must be complete. It is under this rule that ins. cases so constantly break down before the Courts. The witnesses become intimidated and vary or qualify their evidence.

The *proof* of fraud need not necessarily be estab. by affirmative testimony. It may be shown by circumstances, from the existence of which the inference of fraud is natural and irresistible.

A party *committing* fraud cannot in any case himself avoid the contract on the ground of fraud.

The fraud of an *agent*, by a misrepresentation which is embodied in the contract to which his agency relates, avoids the contract.

Fraud, as connected with *Ins. Contracts*, consists in a misrepresentation or concealment of *material* facts; and is treated by the Courts as of two kinds, viz. *suppressio veri*, and *suggestio falsi*. The first of these is *concealment*, and as such is legal or constructive fraud. We have given a very full account of its bearing upon ins. contracts under title CONCEALMENT, and need not therefore re-enter upon it. The second head embraces *misrepresentation*, or actual, positive, legal or moral fraud. It includes cases of intentional and successfully applied cunning, deception, artifices used to circumvent, cheat, or deceive another: as the statement of a falsehood, when the party making it was bound to disclose the truth; or of any wilful misrepresentation with intent to deceive. This part of the subject will be dealt with fully under MISREPRESENTATION.

Concealment and *representation* are not correlative terms. A concealment, when it avoids the pol., is of those facts that tend to *enhance*; while representation is of facts that tend to *diminish* the risks, as they would be otherwise understood by the underwriter.—*Gristvold*.

Lord Coke says: Fraud, covin, collusion, and deceit are often used as synonymous words, and in whatever shape or form they appear, are always deemed odious in the eye of the law. In a word, fraud or covin may, in judgment of law, avoid every kind of act; it invalidates as much in a court of law as a court of equity. Courts of equity and courts of law have a concurrent jurisdiction to suppress and relieve against fraud; but the interposition of the former is often necessary for the better investigating truth; and to give more complete redress.

Blackstone says: Insurances being founded on equitable principles, which chiefly result from the special circumstances of the case; and being contracts, the very essence of which consists in observing the purest good faith and integrity, they are vacated by any, the least shadow of *fraud*, or undue concealment.

[CLAIMS.] [CONCEALMENT.] [CONTRACT OF INS.] [EVIDENCE.] [FALSE SWEARING.] [INSOLVENCY OF INS. ASSO.] [INS. FRAUDS.] [LIFE INS. POLICY, ASSIGNMENT OF.] [MISREPRESENTATION.] [MISCONDUCT OF INS.] [NUMBERING OF INS. POL.] [REPRESENTATIONS] [WARRANTIES.]

FRAUDS ON INS. ASSO.—See INS. FRAUDS.

FRAUDS, STATUTE OF (A.D. 1677), 29 Car. II. c. 29, s. 3.—The main object of this stat. was to take away the facilities for fraud, and the temptation to perjury, which arose in verbal obligations, the proof of which depended upon unwritten evidence. It accordingly required contracts of the classes which it enumerates to be put in writing. It was almost a necessary precursor and adjunct to our Stamp Laws.

Contracts of ins. being capable of enforcement whether verbal or written [except as in *France*, where the Code requires a written contract], have been sometimes regarded as not coming within the Stat. of Frauds. But the Gambling Acts requiring the person interested to be named in the pol., appear to bring all pol. made in the U.K. within the stat. [GAMBLING ACTS.]

In the States of *New York* and *Ohio*, it has been deemed essential that ins. contracts should be in writing; but the law upon the point is not regarded as settled. [*Bliss on Life Ins.*, 2nd ed., p. 196.]

FRAUDULENT CONCEALMENT.—See CONCEALMENT.

FRAUDULENT INS. OFFICES.—See INSURANCE FRAUDS.

FRAUDULENT INSURANCES.—See GAMBLING INS.; INS. FRAUDS; INS. WAGERS; LOTTERY INSURANCES.

FRAUDULENT PREFERENCE.—If any co. about to pass into liquidation, make such a preferential disposition of its property as would, if made by a trader passing into bankruptcy, be deemed a fraudulent preference, the transaction shall be set aside—*vide* Cos. Act, 1862, sec. 164.

FRAUDULENT REPRESENTATION.—See MISREPRESENTATION; REPRESENTATIONS; WARRANTIES.

FRAUDULENT TRUSTEES ACT.—The Act bearing this title—20 & 21 Vict. c. 54—passed in 1857, was repealed by 24 & 25 Vict. c. 95 (1861) and other provisions made by 24 & 25 Vict. c. 96—*An Act to consolidate and amend the Statute Law of England and Ireland relating to Larceny and other similar Offences*. The Act defines a trustee as follows: The term *Trustee* shall mean a trustee on some express trust created by some deed, will, or instrument in writing, and shall include the heir or personal representative of any such trustee, and any other person upon or to whom the duty of such trust shall have devolved or come, and also an executor and administrator and an official manager, assignee, liquidator, or other like officer acting under any present or future Act relating to joint-stock cos. bankruptcy or insolvency.

The trustee clauses commence with sec. 80, which enacts that trustees fraudulently disposing of property are guilty of misdemeanor; but that no prosecution for such offence shall be commenced without the sanction of some Judge or the Attorney-General.

Sec. 81. Whosoever being a director, member, or public officer of any body corporate or public co., shall fraudulently take or apply for his own use or benefit, or for any use or purposes other than the use or purposes of such body corporate or pub. co., any of the property of such body corporate or pub. co., shall be guilty of a misdemeanor, and being convicted thereof, shall be liable at the discretion of the Court to any of the punishments which the Court may award as hereinbefore last mentioned.

82. Whosoever being a director, public officer, or manager of any body corporate or pub. co., shall as such receive or possess himself of any of the property of such body corporate or pub. co., otherwise than in payment of a just debt or demand, and shall with intent to defraud omit to make or to cause or direct to be made a full and true entry thereof in the books and accounts of such body corporate or pub. co., shall be guilty of a misdemeanor, and being convicted thereof shall, etc.

83. Whosoever being a director, manager, public officer, or member of any body corporate or pub. co., shall, with intent to defraud, destroy, alter, imitate, or falsify any book, paper, writing, or valuable security belonging to the body corporate or pub. co., or make or concur in the making of any false entry, or omit or concur in omitting any material particular in any book of account or other document, shall be guilty of a misdemeanor, etc.

84. Whosoever being a director, manager, or public officer of any body corporate or pub. co., shall make, circulate, or pub. or concur in making, circulating or publishing any written statement or account which he shall know to be false in any material particular, with intent to deceive or defraud any member, shareholder, or creditor of such body corporate or pub. co., or with intent to induce any person to become a shareholder or partner therein, or to entrust or advance any property to such body corporate or pub. co., or to enter into any security for the benefit thereof, shall be guilty of a misdemeanor, etc.

The punishment referred to in the preceding sections is at the discretion of the Court: to be kept in penal servitude for any term not exceeding 7 years, and not less than 3 years—or to be imprisoned for any term not exceeding 2 years with or without hard labour, and with or without solitary confinement.—Sec 75.

FREE OF ALL AVERAGE [F. A. A.]—A warranty in marine ins. pol. exempting the underwriter from general as well as particular average: leaving him liable on total loss, absolute or constructive, only; and for charges under the suing and labour clause, necessitated by endeavours to avoid it.

The general words of this warranty in a Lloyd's pol. are "warranted free from average, unless general, or the ship be stranded, sunk, or burnt." The words were added to the pol. about 1749, with the intention of restricting the underwriter's liability for particular average losses.

Most perishable goods are insured, in this country, "free of average," the underwriter thereby stipulating that in respect of such articles he will be liable for nothing short of a total loss. The turning point in cases of this kind usually is, what, upon articles so insured, amounts to a total loss?—*Arnould*, 3rd ed. p. 897.

If by the pol. the insurers are free of average, they are not liable, in case of stranding or other accidents, for any damage, repairs, or charges, when the ship is got off, and the stranding has not been absolute and complete, so as to authorize an abandonment.—*Valin's Commentary on French Marine Ordin.*

In these last two kinds of pol., valued free from average, and interest or no interest, it is manifest that the performance of the voyage or adventure, in a reasonable time and manner, and not the bare existence of the ship or cargo, is the object of the ins., and so it has been adjudged.—*Cunningham*.

The modern Lloyd's pol. contains the following: 1. Corn, fish, salt, fruit, flour, and seed, are warranted free from average, unless general, or the ship be stranded. 2. Sugar, tobacco, hemp, flax, hides, and skins, are warranted free from average under 5 p.c. 3. And all other goods, also the ship and freight, are warranted free of average under 3 p.c., unless general, or the ship be stranded.

The language of this stipulation is very ambiguous, and a great variety of questions have arisen regarding its construction. The first question is, what is included under the words by which the enumerated articles are described in the first and second clauses? As to this, it has been decided in the U.K., the word corn includes malt, peas, and beans, but not rice; and that the word salt does not include saltpetre.

In the U.S. it has been decided that hides and skins do not include furs; and that the specification of one description of enumerated article, as dried fish, excludes all other descriptions of the same, as pickled fish. So also where the word "roots" was among the enumerated articles, it was held not to include *sarsaparilla*, because it is not liable to decay by sea damage.—*Arnould*. [AVERAGE.] [CONTRACT OF INS.] [GENERAL AVERAGE.] [PARTICULAR AVERAGE.]

FREE BENCH.—In Law, a widow's customary dower out of copyholds. It differs from dower mainly in this, that it only attaches on lands of which the husband died seised. The term is equally applicable to the estate which by the custom of some manors the husband takes in his wife's copyholds after her death, which, however, is usually termed his *Curtsey*. Since free bench is only claimable by special custom, the estate which is to be taken, alike as to its quantity, quality, and duration, must be such as the custom prescribes.

FREEBOARD.—The space between the level of the upper deck and the line of flotation of a ship.—See **LOAD LINE**. [DECK LOADS.]

FREE ON BOARD.—The price at which goods are sold, free of all shipping charges.

FREE FROM CAPTURE [F. C. & S.].—This is a warranty frequently inserted in pol. of marine ins. in times of war.—See **CAPTURE**; also **SEIZURE**. [WARRANTIES.]

FREE COURSE.—Having the wind from a favourable quarter.

FREE METHODIST AND GENERAL BENEFIT SO. LIM.—Founded in 1867. This Co. issues life pol. of the industrial class. Its transactions are very limited, as may be seen by reference to its accounts filed ann., and pub. in the Parl. return. Mr. D. Marshall is Man. of the life bus.

FREE FROM PARTICULAR AVERAGE [F. P. A.].—This warranty is of a more limited scope than that of "free of all average," already reviewed. It will be considered more particularly under the title **PARTICULAR AVERAGE**. [WARRANTIES.]

FREE POLICY PLAN OF LIFE INS.—This is another of the several plans which have been devised to remedy the loss which might otherwise accrue to policy-holders by the lapsing of their policies. The plan is simply this: those who are desirous of discontinuing, or are unable to continue, the payment of the prem. necessary to keep their pol. on foot, may surrender them, and receive, instead of money, another pol. of reduced amount—the amount being such a sum as the surrender value, treated as a single prem. paid down, will purchase a new pol. for. Such pol., being subject to no future prem., is properly termed a free pol. In most cases, if the orig. pol. was parti., this free pol. has bonus add. Some of the leading offices have adopted this plan, which is an excellent one, inasmuch as it preserves the true idea of life ins.

1845.—The system of granting free pol. was adopted by several of the French life offices at this date; and had prob. been in use at an earlier period. [FRANCE, sub-heading *Life Ins. Practice*.]

1850.—The *United Service and Gen. Life*, founded in London this year, adopted the feature of "free pol."

Mr. W. H. Porter, in a letter to the *Assu. Mag.* of this year (vol. i. p. 94), points out an objection to the plan, in the fact that the office would no longer have any control over the limits of residence of the insured; but admitted that the same objection applied to all "single prem. pol."

FREE PORT.—Ports open to all comers, free of entry-dues, as places of call, not delivery.

FREE FROM SEIZURE IN PORT [F. S. P.].—This is another warranty sometimes inserted in pol. of marine ins.—See SEIZURE; also PORT. [WARRANTIES.]

FREE SHIPS.—Neutral ships. Also a piratical term for a ship, where it is agreed that every man on board shall have an equal share in all prizes. [NEUTRAL SHIPS.]

FREE TRADE FIRE INS. CO. LIM.—Founded in Scotland in 1871, with an authorized capital of £2000. We believe it never got into active operation.

FREE TRADER.—A former designation for ships trading under licence to India, independent of the old East India Co.'s charter.

FREE WILL.—See HUMAN WILL, OPERATIONS OF THE.

FREEHOLD.—In Law, a term which is used in two different senses: 1. To express the quantity of estate which a man may have in lands or tenements. 2. To express a tenure by which lands and tenements are held. Thus an estate of freehold, to satisfy the full acceptance of the term, must be both sufficient in quantity of interest, and sufficient in tenure.

1. As to quantity of interest: all estates for a term unlimited in duration are estates of freehold; and they are divided into estates of inheritance, and not of inheritance. The first of these are either absolute (fee simple) or limited (fee tail, or fee simple conditional). The second are estates for life, or for an uncertain period, limited within the term of a life—as an estate granted to a widow *durante viduitate*. Such estates as this are by the law regarded as estates for life, determinable on a given event.

2. With respect to tenure: Freehold is one of the two chief tenures known in ancient times by the phrase "tenure in free socage," and the only free-lay mode of holding property. It is derived from the feudal system, but the services connected with it are honourable and mild. The annihilation of the feudal severities has left this tenure unshackled; and by far the greater part of the real property in the U.K. is freehold. Lands held by copy of court roll according to the custom of a manor are not within this denomination; but are known as COPYHOLDS. But lands held by the custom of the manor, not by copy of court roll, are "customary freeholds."

An estate to be freehold must then possess two qualities: 1. Immobility, that is, the property must either be land, or some property issuing out of or annexed to land; and 2. Indeterminate duration. For even if the utmost period of time to which an estate can last is *fixed and determined*, it is not an estate of freehold. Thus, if lands are conveyed to a man and his heirs for ever, or for the term of his natural life, or for the term of another's life, or until he is married, he has an estate of freehold. But if an estate is limited to a man for 500 years, or 99 years, if he shall live so long, he has not an estate of freehold therein, because his estate is determinate. It is fixed and limited for a specific time, which is contrary to the nature of freehold tenure.

A freehold of inheritance is that wherein the estate passes from the owner (termed in law the *ancestor*) to his heirs. When it endures only for the ancestor's life, it is not a freehold of inheritance.

The actuary has before him very constantly these questions of tenures, not simply in regard to the investment of the funds of his office, but also in respect to valuations of life interests and reversions. [COPYHOLDS.] [LEASEHOLDS.] [LIFEHOLDS.]

FREEHOLD ASSURANCE AND FARMERS ESTATE SO.—Founded under the authority of a special Act of Parl. in 1848—11 & 12 Vict. c. cliii. (local and personal)—*An Act for the Estab. of the Farmers Estate So., Ireland*,—with an authorized cap. of £500,000 in shares. The object being to purchase estates, and after erecting suitable dwelling-houses and draining the land, to resell the same at a profit, after the manner of land sos. The ins. element only came into play in the way of converting the tenancy into ultimate ownership, after the instalments for purchase should have been paid. The Act failed to give a parliamentary title, and hence its operation was incomplete.

Mr. William Bridges was the promoter of the enterprise. In 1850 he pub. a pamph.: *Freehold Assurance and the Farmers Estate So.: a Letter to His Excellency the Earl of Clarendon, K.G., Lord-Lieut. of Ireland*, in a "memorandum" by way of preface to which was the following:

Freehold assu. is simply the application of calculations depending on life contingencies, or annu. for terms certain, to commute rents into a series of payments reproducing themselves, and so estab. an ultimate ownership in fee on the part of the tenant cultivator. The principle has been elaborated by the writer of the following letter, in various treatises, since the year 1839; and while universally applicable to the development of waste lands, and to the formation of an independent body of yeoman freeholders in the colonies, is especially adapted to obviate the evils incidental to the present transition state of the landed and farming interests at home: being a scientifically adjusted medium between the present insecure system of tenure in Gt. Brit. and the Wakefield system of colonization, or absolute purchase of undeveloped lands by the settler, at an experimental and necessarily inadequate price.

The project never developed into active operations. [BUILDING SO. INS.] [EMIGRATION INS.]

FREEING.—The act of pumping or otherwise throwing out the water which has leaked into a ship's bottom. When all the water is pumped or baled out, the vessel is said to be free.—*Smyth*.

FREEK'S ANNUITIES.—This was the title of one of the projects of the South Sea period, 1710-20, of which no trace now remains beyond the title. [ANNUITIES ON LIVES.]

FREEMAN, CHARLES.—Was Surveyor to the *Sun* Fire for a quarter of a century. He gave evidence before the Select Parl. Committee of 1867. He had seen a great many fires, and especially observed the effects of the Tooley Street one. It had been proved, in the instance of Hayes' warehouse, that what are termed fireproof floors, constructed on iron girders resting on iron posts, are quite inadequate to prevent the progress of fire in buildings stored with merchandize. There is very little difference for such purposes between cast iron and malleable iron; the one flies, the other bends. He thought it would be a very great advantage if floors were constructed in this country as they are in France; especially in lodging-houses.

Iron doors, as prescribed by the Metropolitan Building Act, are not of much service in mercantile buildings. The witness then read the requirements of the fire offices with regard to the docks and warehouses, for the lessening of risks and reduction of premiums.

Can you mention any warehouses or docks in London in which those suggestions of yours have been applied?—To a great extent they have been adopted both in the docks and public wharfs; the old warehouses could not comply with those requirements exactly, but they have done a great deal. A large portion of the fire in Tooley Street was composed of 30 warehouses, belonging to Messrs. Scovell, known as Cotton's Wharf, and Depot Wharf. That has been rebuilt entirely on the principles set forth in that paper, and consequently that is at present one of the very best risks with regard to fire in London; every warehouse is now entirely distinct, with all the doors and windows of iron opposite each other, and the parapets are carried through the roof, so that any one warehouse might be burnt down from the top to the bottom without the slightest probability of an extension.

These "requirements" were brought into force immediately after the Tooley Street fire in 1861. Petroleum, although known, had not then been brought into use. It is an article almost prohibited from storage in ordinary Lond. warehouses. Limitation in size and isolation are the principal safeguards for such buildings. Thatched cottages in the country were highly dangerous and the cause of many fires. The prem. for any house that is thatched is higher than it otherwise would be. The *Sun* Fire Office takes as little of that class of risk as it can, unless it is for old friends and customers.

Stone is not so durable as brick in case of fire. It shatters very much; and granite stands worse than any other kind of stone, though it is not generally known. Saltpetre and nitrate of soda are specially hazardous when stored with other goods. The warehouses of railways and docks are exempted from any Act of Parl. but their own. It is very difficult to discover the cause of fires:—"If a man means to set fire to his place, he takes precautions not to be found out; it is not so easy to burn a house down; but it is very easy to set fire to it." He was not in favour of inquiring into the cause of fires in every instance. He had had to look after 400 fires himself in Lond. in a single year. It would be an endless job. He thought there should be a fine for gross carelessness. *Fires arise very much from that cause. Tradesmen, whose stock is heavily insured, and are not doing well, want a ready market, and there is no more ready market than an ins. office, for bad, or unsaleable goods.* The geometrical contents of a warehouse is limited to 216,000 feet, but the Act is evaded by piling one warehouse over another, by application to, and under sanction of, the local surveyor.

It would be very desirable that there should be a General Building Act applying to the whole country. This is a brief abstract of his evidence.

FREEMAN, GEO. SCOTT.—Sec. of *General Ins. Co.* since 1868. He was previously a Director of the Co.

In 1873 he received from the Camberwell Board of Poor Law Guardians a testimonial in plate, as a mark of their appreciation after 19 years' service, 11 of them as Chairman of the Board.

In 1876 he received from the District Mans. and Agents of the *General*, a testimonial in the shape of a timepiece, a pair of tazzas, and a gold watch, in appreciation of his services to the Co.

The Co. has made fair progress under his management.

FREEMAN, JOSEPH.—Man. of *Fire Re-insurance Corp.*, of which he was the active founder, in 1874; being, however, joined in the enterprise with Mr. Pearce, since retired. Mr. Freeman commenced his ins. career about 1851 with the *Times F. and L.*, as District Inspector in Bedfordshire. He was afterwards associated with the *Brit. Equitable* in a similar capacity. He at a later period was connected with the *Scot. Union*. In 1871 he held office in the then newly formed *Brit. National Fire*. There he gained an experience which led to the founding of his present Co. Mr. Freeman has sound business capacity. Some years since he pub. a pamph. on *Partnership Ins. (Life)*.

FREEMASONS AND GENERAL LIFE ASSU. LOAN, ANNU., AND REVERSIONARY INT. CO., "uniting the advantages of a Mut. Asso. with the security of a Proprietary Co."—Founded in 1838, with an authorized cap. of £500,000, in 25,000 shares of £20. The prosp. of the Co. embodied several features which were then either very modern, or entirely new.

The Co. was constituted on the "mixed" plan, in the prosp. designated the "modern

mutual"—the whole of the profits of the parti. branch were to be given to the insured of that branch. The prem. might be paid by half-yearly or quarterly instalments; or might be on the *increasing or decreasing, or half-credit* scale (the latter for 5 years, with 5 p.c. int.). Lapsed pol. might be renewed at any time within 6 months on payment of prem. in arrear, and fine. Then:

III. In cases of *error*, either as to the age, or in the form of pol., or in the answers of referees, such errors, unless fraudulent, will not be deemed to vitiate the pol.

IV. When a party effects a pol. upon the life of another, it is often difficult to say how far the person so assuring is *interested*; or even when ascertained such interest may cease or be modified by circumstances. The Co. will not inquire into these facts, but will be satisfied if the party assuring had at the time a *bona fide* interest in the life of the assured, so as to defeat all grumbling and fraudulent speculations.

V. If the assured die in a *duel*, by *his own hand*, or *under sentence of the law*, such death will not invalidate a pol., except so far as it was the property of the deceased. But as even with this liberal construction, such a condition bears hard upon the family of a person so deceased, the Directors will be authorized to give a certain amount of the pol. to the widow and children of the assured.

VI. All *claims* on the Co. will be settled within 3 months after the death of the party assured is proved, or even at an earlier period on an allowance of discount.

VII. There will be no *fees* payable for non-attendance, nor any charge for the *pol.* beyond the amount of the stamp.

VIII. With a view to the further accommodation of the public, *many of those forms and examinations, which have hitherto encumbered the effecting of pol., will be omitted, as being the cause of much unnecessary delay.* The inconvenience to the assured of being heard only on a fixed Board day will be obviated by the constant attendance of the officers of the Co.

X. Pol. will, if desired, be purchased altogether; or *reduced*, if circumstances require it; and the value of the pol. to the extent of the amount reduced may be considered as paid in advance upon the reduced pol.

XI. The Co. will accommodate the assured with *loans* upon the security of their pol., in proportion to their estimated value.

XIII. Where money is left upon *trust*, by deed or will, and the parties interested are notwithstanding desirous of an advance, the same may be made and the trustees protected from risk by means of assu., or the purchase of an annu.

XIV. As the law makes no provision for *adopted or natural children*, it is proposed to apply the principle of life assu. to remedy this defect. For this purpose the adopter or parent may effect a pol. on his own life, payable at death, should the child be of age; but should the child not be of age, then the pol. to bear int. at 3 p.c. from the time of the death of the adopter or parent and the child attaining 21; or, if a *female*, on attaining that age, or marrying previously; to become entitled to the amount of the pol. with int., as in the case of a provision under will or *settlement*.

The Co. transacted a considerable bus.; and in Dec. 1849, it changed its name to that of the *Albert*, under which it finally attained unenviable fame. Its later hist. has been given under that title.

Mr. G. G. Kirby was Man. Director of the Co.; Mr. Joseph Berridge its Sec.

FREEZING TO DEATH. Is it an accident? See FROST.

FREIGHT AND CHARGES (FIRE).—In adjusting fire losses on merchandize, freight and charges have constantly to be taken into account, and added to the invoice price of the goods or produce. There are two methods in practice: 1. To recognize freight and charges as entering into the cost of the merchandize throughout the calculation of values, at some estimated rate p.c., varying according to the facts of each case. 2. To discard all estimate of freight and charges until the "amount destroyed" has been ascertained, when the proper allowance is made upon the amount.

Although the latter appears the more simple method, Mr. Griswold contends that the former is the more equitable plan, vide *Fire Underwriter's Text-book*, p. 555-6.

FREIGHT (MARITIME).—In Mercantile Law, the sum agreed to be paid by a merchant or other person for hiring a ship, or part of a ship, for the use of such ship or part of it for a specified voyage, or for a specified time. The contract is usually made by means of the technical instrument called a CHARTER-PARTY; but in the absence of any special agreement, it follows the custom or usage of trade.

Mr. Crump, in his *Principles of the Law of Marine Ins. and Gen. Average*, 1875, gives the following terse definition—"Freight means the earnings or profit derived by the ship-owner or the hirer of the ship from the use of it by himself or by letting it to others to be used, or by carrying goods for others."

By the English maritime practice, until a comparatively recent period, freight became the *mother of wages*—for the crew were bound to moor the ship safely, in dock or harbour, otherwise their wages became forfeited. So severely was the axiom maintained, that if the ship was lost by misfortune, tempest, enemy, or fire, wages also were forfeited: because the freight out of which they were to arise had perished with it. This harsh measure was originally designed to augment the care of the seamen for the welfare of the ship; and in it we see the origin of the rule that the wages of the seamen cannot be insured. [SEAMEN'S WAGES.] The modern Merchant Shipping Acts have now provided that no right of wages shall be dependent on earning of freight; in cases of wreck, however, proof that a man has not done his best to save the ship bars his claim to wages. [SHIPWRECKS.]

With the contract of affreightment the *Romans* appear to have been quite familiar. The distinction between the contract by which the whole ship is freighted for a particular voyage or for a definite period, and the case of a general ship conveying, at a certain rate of freight, the goods and merchandize of a variety of individuals, is clearly recognized. And the necessary rule of law, by which the engagement of the master binds the

owners for advances made to the master abroad for refitting the vessel, and other such purposes, were so accurately defined and decided, that the rules laid down coincide very nearly with those observed in practice at the present day.

The freight of the vessel most frequently consisted in giving a right to ship or load a certain number of persons, or quantity of merchandize, and in the obligation to convey such persons and merchandize to a destined port; forming a contract compounded of the *locatio rei* and *locatio operarum*. In this case the contract of affreightment was usually entered into by the master; but under the ordinary limitations of his powers, in consequence of express instructions, or implied from the known and usual description and destination of the vessel. The reach or burden of the vessel was determined by the number of casks it would contain. Sometimes a penal clause was inserted in the contract, to provide for the master not fulfilling his obligation at the appointed time; but he was released from this by *vis major*, irresistible event: as when he had fallen sick, or when the vessel was arrested by public authority, or was unable to keep the sea, without any negligence or fault on his part.

If the contract gave a right to occupy the entire ship, the whole freight was due, however small a quantity of goods were actually loaded. If the contract was by weight or measure, freight was only paid in proportion to what was loaded; and even if a woman was delivered of a child during the voyage, no freight was due for the infant, because it did not increase the weight of the cargo, and did not use the provisions destined for the passengers.

No freight was payable for what perished through inevitable accident; and if it had been paid in advance, it was required to be restored. But if the goods perished through the fault of the party shipping them, as by confiscation from their being contraband, freight was nevertheless due. And the same rule was observed when the loss of goods was occasioned by their own inherent defect, as in the case of *Slaves*, unless the agreement was only to pay freight for those who should arrive at their destination. The owner or master of the vessel had a privilege, or preferable right upon or over the cargo or goods conveyed, for payment of the freight; and the same privilege was extended to the person who had advanced money for that purpose.

The master was responsible for such goods as were delivered to him personally, on the quay or in the vessel: the delivery of goods to one of the mariners or crew, bound the master only so far as the mariner had received them with the consent of the master, express or presumed. This responsibility extended to every loss or damage happening through any fault whatever: as when, having entered the mouth of a river without a pilot on board, the vessel was lost; or as when, having undertaken to convey goods by a particular vessel, he put them, without the consent of the shipper, on board another vessel less seaworthy, which had perished, while the vessel which ought to have carried the goods arrived safe. But, on the other hand, if necessity had compelled the master to tranship the goods—for instance, if it was not possible to enter the port of destination without putting the goods on board another vessel which drew less water, and this second vessel perished with the goods—the master was not responsible, unless he had made the transhipment against the will of the shipper, and without necessity, or had acted imprudently or *mala fide*. In general, irresistible force, by which goods had been destroyed, or had been carried off, as by pirates, was recognized as an exception or defence pleadable by the master.

The master was also obliged to watch over the preservation of the goods which he had taken on board for the purpose of being conveyed, and was held responsible for all damage which was not the consequence of irresistible force. He was not released from this responsibility by proving that the damage, theft, or robbery, had been committed by the sailors, or even by passengers; whether on board the ship or in the port, from the moment the charge of the goods had been entrusted to him; unless, by a precaution which was not prohibited, he had intimated to the shippers that he was not to incur such responsibility, and they had not insisted on his doing so.—*Vide Reddie's Law of Maritime Commerce*, pp. 92-4.

Herein we see that the principles which are laid down in our Courts at the present day, regarding maritime contracts, date back for several thousand years. They have been preserved and acted upon during the greater portion of that period, if not the whole of it; and we feel reasonably sure that contracts of ins. were made conformable to them, then as now. [RHODIAN LAWS.]

FREIGHT (MARITIME), INS. OF.—Ins. on freight includes, or may include: 1. Freight proper. 2. The chartered hire of the vessel. 3. The increased value to the owner of his own goods carried on his own ship. 4. Payments in advance in respect of 1 and 2.

Sums borrowed by captain from charterer at port of loading are taken to be *advanced freight*.

Money advanced to the insured as owner of the ship on account of freight of the cargo loaded on board her, and subject to the risk of the voyage, is substantially freight, and may be insured by a pol. on "money advanced on account of freight."

Freight may be ins. for either a part or a whole of an intended voyage, or a part or the whole of the time which the voyage is likely to occupy.

Freight in regard to ins. is more generally of two kinds: 1. *Bill of Lading Freight*, i.e. the price payable by the merchant for the carriage of his goods in the shipowner's vessel. 2. *Chartered Freight*, i.e. the remuneration payable to the shipowner for the use of his ship under the terms of a charter-party.

The underwriter's risk upon the first of these interests may generally be considered coincident with the risk on goods, since it does not commence until the cargo is shipped, and then only applies to such portion of it as may be actually on board; unless (and the exception is important) the cargo has been contracted for under a valid agreement, and is lying in readiness to be placed on board; and the ship is ready to receive it.

The termination of the risk on cargo and freight respectively is also generally simultaneous: for as fast as the goods are landed in safety, the shipowner becomes entitled to the freight upon them, and the risk of the underwriter on freight is proportionately reduced—so that when a ship is lost when a portion of the cargo has been discharged, the loss on freight is proportionably reduced.

But in the case of chartered freight the risk commences directly the vessel breaks ground under the charter-party, i.e. immediately she sets out on the voyage on which the freight is ultimately to be earned—quite irrespective of the question of whether any freight has been placed on board of her, or is in readiness to be so placed—and continues until the vessel has performed her contract.—*Arnould; McArthur*.

Freight must be mentioned *co nomine*, in the pol. of ins., by inserting the words "on Freight" in the margin, or appending them at the foot of the instrument. It is not covered by a pol. on goods generally. The shipowner also has an insurable interest in freight.

The amount which may be recovered on an "open" pol. in respect of an ins. on freight is the full amount at risk as per charter-party, or bills of lading, together with all commission and premis. of ins. When the owners of a vessel insure on a pol. on freight, and some of the goods on board belong to them, and are carried in their own vessel, when lost, they are entitled to recover loss of freight as for these. So also, where the pol. is conceived as an ins. on the shipowner's own goods, this has been held as a pol. on freight in similar circumstances.—*Paton*.

Passage-money, while in some respects resembling freight, is in others very different. [PASSAGE-MONEY.]

When the loss of a ship occurs, there is no necessity for *abandonment* as far as the ins. on freight is concerned.

The English and American law recognizes pol. upon freight generally, and the doubts which have arisen and complicated the law by decisions of a kind not altogether reconcilable relate mainly to the commencement of the risk. It was originally doubted whether the insured could recover on a "valued pol." if part of the goods only were shipped. Doubts were also suggested whether the fact of the pol. being "open" or "valued" made any difference, and in *Forbes v. Aspinall* (1811), Lord Ellenborough said that it did not. His Lordship said, "To recover in any case on a pol. on freight the insured must prove that, unless some of the perils insured against had intervened to prevent it, some freight would have been earned, either by showing that goods were put on board, or that there was some contract for doing so; and in either case, if the pol. be open, the sum payable for freight, with the premiums and commission, is the extent to which the underwriters are liable."

Kent, in his *Commentaries* (s. 270), confines the interest to freight of goods on board or ready to be shipped. "The risk," he says, "generally begins from the time the goods or part of them are put on board; and if the ship has been let to freight under a charter-party of affreightment, the right to freight commences, and is at risk, as soon as the ship breaks ground; and if the charterer omits to put on board the expected cargo, and the ship performs the voyage in ballast, the right to freight is perfect. But when the freight arises from the transportation of the goods, it commences when the goods are put on board, and the policy attaches to the extent of the goods on board or ready to be shipped." The words used by Lord Ellenborough, "some contract," for putting goods on board, are too vague. The contract must be specific and binding. In the language of Phillips, adopted by Mr. Justice Blackburn, the contract should be with another "for freight." This learned Judge said in *Barber v. Fleming* (1869), "When a shipowner has got a contract with another person, under which he will earn freight, and has taken steps and incurred expense upon the voyage towards earning it, then his interest ceases to be a contingent thing, but becomes an inchoate interest, and is an interest which, if afterwards destroyed by one of the perils insured against, is lost, and ought to be paid for by the underwriters."

The connexion between *ship* and *freight* is so close that the most obvious mode of avoiding all difficulty is that suggested by Benecke, who, at p. 17 of his treatise on the *Principles of Indemnity*, after remarking that the practice of insuring ship and freight separately is attended with many difficulties, says that the best, if not the only, way to obviate them, and to put the owner, under all circumstances, in the same position as he would have been in case of a safe arrival, would be to insure the ship and freight jointly, as one individual risk in the same policy. *Tonge v. Watts* (2 Str. 1251) thoroughly

supports this suggestion. There the cargo was ready, but the ship was not. The loss on the ship was recovered, but the goods not being on board, it was held that the underwriters were not liable in respect of freight. This principle as to goods being on board has been, as I have shown, departed from; but if ship and freight had been ins. in the same pol. as one individual risk, no dispute could have arisen.—*Crump*, 1875.

The rule for adjusting a *partial loss* of freight is very simple. Where the sum insured, or the valuation in the pol., is less than the value of the interest at risk, the underwriter pays the same proportional part of the loss, that the sum insured, or the valuation in the pol., is of the value of the freight. If the sum insured, or the valuation in the pol., equals the value of the interest, then he pays the whole of the loss.—*Arnould*.

A *total loss* on ins. of freight is simply in effect an undertaking that if the shipowner fail, from any of the perils insured against, to earn the freight, he will be indemnified by the underwriters to the extent of their subs. But if the loss of freight be by other means than the perils insured against, then there is no claim against the underwriter.

An *insurable interest* in freight depends on the co-existence of two rights in the insured at the time of the loss, viz. a title (legal or equitable) to the ship, out of the ownership of which the right to freight accrues; and an inchoate right to the freight. The right of freight is one of the rights of ownership; and the inchoate right arises in that the person insured would certainly have earned the freight but for the perils insured against. An insurable interest in freight may be obtained by assignment for value; and by a shipper who has prepaid freight on the goods shipped.

It will be seen from the preceding that the questions which arise in regard to the ins. of freight are of a highly technical character. It is impossible to treat them in a popular manner. The most modern, and perhaps the best authority on the subject, is *The Principles of the Law of Marine Ins. and Gen. Average*, by W. F. Octavius Crump, 1875.

We add the following historical notes:

1681.—The celebrated Ins. Ordonnance of *France* of this date contains the following among the clauses relating to ins. of freight:

15. The owners of ships and the masters shall not have ins. made on the *freight* their vessels may make; nor shall the merchants on an expected profit on their goods, nor seafaring men on their hire.

Most of the Marine Ins. Ordin. forbid the ins. of seamen's wages, and such ins. is altogether unlawful in Gt. Brit.; but this clause goes much further, and stands alone, we believe, in regard to its other prohibitions. The idea in view is clearly against the ins. of profits in any form. [PROFITS, INS. OF.] The *Code du Commerce* (art. 347) confirms the Ordon.

Arnould says that although the prohibition is absolute against the ins. of *expected freight* (*fret à faire*), yet the French legislature permits the ins. of freight actually earned (*fret acquis*).—Part i. chap. 2.

Mr. Crump goes further, and taking the text of Valin as his authority, says: "He [the French shipowner] can insure his ship, adding to her value all the expense he has incurred in fitting her to perform the voyage; and what he gains by stipulating for the freight as earned, is that he is not called upon to deduct the amount from the value of the ship, and insure only for the surplus. And if *pro rata* freight be earned, it is, as in English law, retained by the shipowner on abandonment."

1781.—The ins. of freights is allowed by the laws of some States and forbidden by those of others: but a medium in this affair would be best: that is, proper distinctions ought to be made. With regard to ships that are intended for earning freights, care should be taken that the freight and the expenses of their fitting out be not both insured, or a *double ins.* made.—*Weskett on Ins.*, p. 244.

1795.—Lord Kenyon laid it down in *Murdock v. Potts* that freight could not be ins. for part of the intended voyage. But this position, unjustified by principle, was overruled by Lord Ellenborough in the case of *Taylor v. Wilson* in the Court of King's Bench (1812). "It is now quite clear that freight, like any other subject, may be insured either for part or the whole of the voyage, or of the time over which it is likely to extend."—*Arnould*.

[ABANDONMENT.] [AVERAGE.] [BOTTOMRY.] [COMMENCEMENT OF RISK.] [CONSTRUCTIVE TOTAL LOSS.] [DURATION OF RISK.] [GENERAL AVERAGE.] [INSURABLE INT.] [PARTICULAR AVERAGE.]

FREIGHTER.—He who causes goods to be loaded on board a ship. As to the insurable interest of the freighter, see preceding art.; also *Arnould*, chap. iii.

FRENCH MORT. T.—See FRANCE, sub-heading MORT. T.

FRENCH ORDONNANCE OF MARINE (1681).—See FRANCE, sub-heading *Marine Ins.*

FREND, WILLIAM A. M.—Was Actuary of the *Rock* from its commencement down to his death, in 1827.

1822.—There was pub. at Newark (Notts): *The Constitution of Friendly Sos. upon Legal and Scientific Principles exemplified by the Rules and Tables of Calculations adopted under the advice and approbation of William Morgan, Esq., F.R.S., and Wm. Friend, Esq., for the Government of the Friendly Inst. at Southwell.* [FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF.]

1824.—Mr. Frend was reputed to be the writer of the art. Assurance, signed B.B., pub. in the Supplement to the *Encyclo. Brit.* this year.

1825.—He gave evidence before the Select Parl. Committee on F. Sos.; and he was very largely consulted in regard to the T. of rates, etc., for these Sos.

FRESCOED WALLS.—Ornamentations of this class whether in public buildings or private dwellings, and whether consisting of carving, gilding, stucco, or similar appliances, are not covered by fire ins. unless specifically named in the pol.

FRETTUM FRECTUM.—The freight of a ship; freight-money.

FRICTION.—Friction (of machinery) is believed to be a constant cause of fires in manufacturing and industrial risks. A keen American adjuster of fire losses has another, and quite original, theory about friction. He thinks rubbing a 5000 dol. pol. against a building or stock worth only half that sum or less, is very likely to produce fire. We think so too! The cause should be removed whenever practicable.

FRIEND IN NEED LIFE, FIRE, GUARANTEE AND ACCIDENTAL DEATH INS. CO. LIM.—The career of this Asso. was a most remarkable one. In 1829 it was organized in Whitechapel as a friendly society, and between that year and 1850, it remained as a public-house burial so. in the East London district. From 1851 onwards it assumed larger proportions, still as a friendly so., and a few years later found itself with an assumed income of £50,000. We say assumed, because the system of accounts adopted by the So. rendered it exceedingly difficult to say what the actual income really was. Every agent was debited with the full amount of subs. he ought to receive, and allowed to credit himself afterwards with such sums as he asserted he had not received. But the gross sum was treated as the income of the So.; and the debits against the agents were accumulated until it is said they became twelve times greater than the real cash assets of the So. The whole of these accumulations, most of which had become bad debts, were treated as part of the accumulated funds of the So.

1863.—The Asso. was converted into a limited liability co. under the title above given, with an authorized cap. of £200,000, in 40,000 shares of £5. This cap. would have been abundantly sufficient, with the income it already had, to have worked the asso. through to success if it had confined its operations to sickness and life bus.; but when it took up accident bus., and, still worse, the bus. of marine ins., its fate became only a question of time. The offices of the Co. were now moved to Bedford Street, Strand, and Mr. Geo. W. Wheeler was announced as Gen. Man.

1864.—The Co. took over the accident bus. of the *City and County*.

1866.—The Co. became itself amalg. with the *Empire*, 1865, which event contributed in no small degree to the confusion and complications which have attended the liq. of the affairs of that Co. In the process of liq. the shareholders of this Co. (*Friend in Need*) have had to pay up the whole of their subscription; and have been called upon also to pay in respect of the shares they held in the *Empire*—given in exchange for their *Friend in Need* shares.

At the date of the amalg. Mr. W. E. Corner was the underwriter of the marine depart.

For an account of some of the difficulties which have been experienced in the liq. of this and the amalg. cos., see *EMPIRE*, 1865.

1873.—An agreement was come to, under the sanction of the Court of Chancery, between the liq. of the Co. and the liq. of the *Empire*, 1865, by which the creditors of this Co. were to be at liberty to prove their debts against the *Empire* Corp., on the footing of the validity of the amalg., but subject to the right of the liq. of the Corp. to dispute the same.

1877.—We believe the liq. is still steadily progressing. The delay in winding-up the affairs of the Co. has not arisen from any want of skill on the part of the liquidator; but is due entirely to the interminable confusion of the affairs of the Co., coupled with the cumbrous machinery of the Court of Chancery. [LIQUIDATION OF INS. ASSO.]

FRIEND-IN-NEED JOURNAL.—A pub. under this title was for several years issued by the Ins. Asso. bearing that name. It was very well edited, but its circulation was chiefly confined to the agents of the Co.

FRIENDLY INS. SO. FOR INS. HOUSES FROM FIRE.—This Asso. was founded in Lond. in 1683 [Deed dated 28 Aug. 1684] by Henry Spelman and his partner. It was a *Mutual Contribution Asso.*—the first of its class. A great controversy arose between its managers and those of *The Fire Office*, founded in 1680. This dispute was ultimately remitted to the King in Council, and settled by him. The details of its estab. and its controversies have already been given under *FIRE INS.*, HIST. OF, and need not now be repeated.

1685.—There appeared in the *London Gazette* of 6th July the following adv.:

There having happened a fire on the 24th of the last month by which several houses of the *Friendly So.* were burned to the value of 965 pounds, these are to give notice to all persons of the said So. that they are desired to pay at the office Falcon Court in Fleet Street, their several proportions of the said loss, which comes to 5s. 1d. for every £100 insured, before the 12 Aug. next.

1708.—Hatton, in his *New View of Lond.* pub. at this date, says: "The *Friendly So.* office in Palsgrave Court without Temple Bar, was the next office [founded], but the first that insured from fire by Mutual Contribution (Anno 1684), the sole project of the late ingenious Henry Spelman, Esq., deceased, who with William Hale, Esq., undertook (for 16d. p.c. p.a. paid down, and 6s. 8d. more deposited in the undertaker's hands, to secure

the payment of the contribution to fires that may happen in the So.) to insure £100 for 7 years on a brick building, and in proportion for other sums; for the payment of which losses and accounting for the deposit there are funds in hand settled. They employ several men (with liveries and badges) to extinguish fire. Their number [of policies?] is about 18,000."

1781.—Weskett, writing at this date, says that the So. had a "considerable security in hand, settled by Trustees; and for extinguishing fires the So. continually keep in their service 22 firemen, who wear the Co.'s badge, and are ann. elected."

1790.—Before this date the bus. of the So. was reported to have merged into that of the *Union So.*, of which event, however, or of the causes which led to it, we can find no trace. There had been a number of serious fires in Lond. in 1784-5-6. It is possible that by reason of these its funds had become exhausted.

FRIENDLY INS. SO. OF ABERDEEN.—Founded in that city in 1831 as a friendly so. for the purpose following: "Towards making good any loss sustained by the members by fire, flood, or shipwreck; or by any contingency of which the prob. may be calculated by way of average, whereby they shall have sustained loss or damage of their live or dead stock, or goods, or stock in trade, or of the tools or implements of their trade or calling." The So. underwent some changes in 1847 and 1848. The new rules were certified by Mr. Thomas Cleghorn, the Registrar of F. Sos. in Scotland, under date Edin. 19 Oct. 1847, and contain:

3. Each member shall, besides the entry-money hereinafter mentioned, contribute towards the funds of the So. an ann. payment proportioned to the risk or contingency undertaken by the So.; and all such payments shall be made in advance, or at the time the So. undertakes the risk.

4. The rates of contribution or payment shall be regulated by one or more of the three considerations entering into the nature of the ins.

Then follow a series of details relating more particularly to fire ins. risks; and finally the rules for the government of the So. The details for the other branches of the So.'s bus. are not stated in the rules before us.

The So. never transacted any fire bus. in Aberdeen; but it founded agencies in *Greenock* (which ended in loss) and in *Hull* and *Boston*; but very little was done. It discontinued fire bus. in 1851. Mr. Alexander Yeats was the founder, and remained its Man. for some years. Some further changes in the rules were made in 1853. The So. still continues under the title of the *Aberdeen Mut.* [MEDICAL EXPENSES INS.]

FRIENDLY INS. SO. [OF EDINBURGH].—This was the first fire ins. asso. founded in Scotland, and takes its date from 1720. We glean the following particulars concerning its origin. About this date there were several disastrous fires in Edinburgh, by which many individuals sustained great losses; and as the subject of insuring houses was at that time unknown, or at least had never been adopted, in Scotland, a meeting of the citizens of Edinburgh was held for the purpose of founding a so. for the mutual protection from loss by fire. The result was the formation of this office. A certain per-centage upon the sum insured by each contributory was paid for a *perpetual ins.* on their property, and these contributions formed the ins. fund of the asso.

The D. of Sett. of the So. bore date 13 January, 1720, and took the following shape: *Articles of agreement to be signed by the Friendly So. of the Heritors of Edinburgh and suburbs thereof, in Canongate, Leith, etc., for a mutual ins. of their tenements and houses from losses by fire.*

1. That each subscriber, contributing as below, his heirs or successors whatsoever in the tenements, houses, shops, cellars, etc., insured, shall be intitled to a perpetual ins. of the tenements, houses, etc., and have an equal and proportionable interest in the stock that shall arise from the said contribution and dividends of profits that shall be made therefrom; *which stock and profits shall be inseparably annexed to the tenements, houses, etc., insured.*

2. Each subscriber shall have his tenements, houses, etc., by him insured, recorded in the books of the So., bearing the value, bounding and present possessor thereof, subscribed by him and 2 of the directors for the time.

3. That a committee of the directors, with such of the So. as they shall call to assist them, shall visit the property of each of the subscribers, that a just and equal value be put thereupon before recording, or the party be bound to the So.

4. That every heritor shall be bound personally, and his tenement really subjected to pay in to the So., to the extent only after mentioned, viz. £4 Scots yearly upon each £1000 Scots value, insured for the space of 25 years, at *Candlemass* and *Lammas*, by equal portions, or in lieu of such ann. payment, 100 marks for each £1000 value insured; and that for his own and the So.'s mut. relief of all damages occasioned by fire in all times coming.

5. Any member or subscriber in this So. refusing or neglecting to pay the said prems. against the time limited, or within 30 days thereafter, shall lose the benefit of this So.; so that in case of any accident by fire during the neglect of his payment, he shall have no reparation of his damage or loss; and the default of his payment is hereby declared not purgeable after any such accident or damage is sustained, but prejudice to the said member to rebuild his tenement, house, etc., on his own charges, and pay up his bygone prems. in order to be restored to the privileges of the So., reserving to the said So. to prosecute such a subscriber as accords, if no damage happens.

6. Any heritor subs. and disposing of his tenement, house, etc., upon procuring his successor's signing in his place, shall be free of any personal obligation, so far as relates to the subject disposed.

7. Any person evicting the right of property, or any subs., and not signing or homologating the right granted to the So. by the subs., and fulfilling conditions prestable by him, shall not be entitled to any of the privileges or benefits of the So. to make good their right, as accords, against the tenement which shall happen to be evicted.

8. Life-renters shall also be admitted to subs. in this So., they giving sufficient security for payment yearly of 2 p.c. of the yearly rent by them insured, at the terms aforesaid; and under the same penalty and certification, for which they shall be alienarily intitled to have their losses made good, either in one sum, or their ann. life-rent to be paid by them yearly, in the option of the life-renter.

9. For accommodating any that shall incline to join in this Friendly So. the books shall lay open every Monday, from 10 to 12 in the forenoon, and attendance given by one or more of the directors, with their book-keeper to receive subs. Each subscriber, at his entry into this So., during the currency of the first year, from opening of books on 13 Jan. 1720, paying 1 year's prem. to prevent all disputes betwixt any suffering member and the So., as to ascertaining partial loss or damages occasioned by fire, where the whole tenement or house, etc., is not burnt down.

10. There shall be ann. chosen at the gen. meeting, by a plurality of voices, 3 persons sworn appraisers for determining the extent of all such damages, and their determination therein shall be final; who shall likewise have the power of determining the value of life-rents.

11. Where any loss, total or partial, happens by accident of fire, upon any of the tenements, houses, etc., insured, the same must be laid before the first gen. quarterly meeting thereafter; which quarterly meetings are to be held the first Monday after *Whitsunday*, *Lammas*, *Martinmass*, and *Candlemass* yearly: and after the same is adjusted, the directors shall give the person or persons sustaining the loss, or any administering for them, an order upon the cashier of the So. for the payment of the same within 3 months thereafter. The area, space, or ground right, with the ruins, if re-built within the space of 3 years, is allowed by the So. to the proprietors *gratis*; and if not re-built within the 3 years from the adjustment and payment of the damage, to belong to the So. if there be no legal impediment hindering him to build within the said 3 years.

12. The accounts of this So. shall be fully balanced, audited, and signed in the books by the directors for the time, against the last lawful day of Dec. yearly; and be laid before the So. the 2nd Monday in Jan. thereafter, to be perused by all concerned, and shall at least remain a month open; and all the members or subs. allowed access without fee or reward.

13. That every subs. have as many voices in the So. as he hath stock insured to the value of £3000, and appoint one of themselves to vote at all meetings and occasions of the So.; the absent members allowed to vote by proxies, given to a member of the So. only.

14. That the So., by the majority of voices present, and proxies for those that are absent as aforesaid, are to chuse 9 directors for managing the affairs of the So. for one year, who are to attend by turns, 3 officiating weekly, whereof 2 to be a *quorum*. The directors so chosen are to appoint a book-keeper, who is also to be cashier, and for whom they are to be accountable to the So.; and to employ such a number of able-bodied experienced fyemen, and other officers as the services of the So. shall require.

15. The directors are empowered to employ the ann. contribution on int., with consent of the So., otherways to the best advantage. The fees payable to the directors for their service and attendance shall not exceed to each of them half-a-crown for each day's attendance.

16. The directors for the time are empowered upon all occasions to call a gen. meeting of the So. by publick adv. in any newspaper, upon 10 days' notice at least.

17. Upon the 2nd Monday of Jan. yearly, new directors for the year ensuing are to be chosen by the plurality of the voices present, and proxies for those that are absent, as by the 14th art. Any of the former directors may be again elected, or new ones chosen, as the plurality of suffrages shall determine; there being at least 3 new ones chosen yearly.

18. That the So. at any gen. meeting may from time to time make such other rules for their government as to them shall seem meet.

These are the "orig. articles" of the Asso. Add. art. were adopted. These we next give.

The "add. art." were 9 in number, as follows. Whether adopted at one date, or at several times, does not appear:

1. That in the front of all copies of doubles to be made of the orig. contract, indenture, or articles; and in all deeds granted by them or to them, in place of the words *Friendly So.* they shall hereafter assume and take the designation of *Friendly Contributors or Co-partners*.

2. That in place of directors, there shall be yearly chosen 9 managers and trustees in ordinary: as also 18 managers and trustees extraordinary, who shall have all the same powers, and be under the same obligations as the directors were by the orig. indenture, contract, or articles: And each and every one of us oblige ourselves to ratify and confirm the powers and trust that shall be given to the said managers and trustees by the majority of the gen. meeting to be held yearly on the 2nd Monday of Jan. as is agreed by the orig. contract or art.

3. That notwithstanding the 14th art. of the orig. contract, each and every member, contributor, shall by himself, or by his proxy (if absent) given to a contributor, have a full voice without relation to shares.

4. The cashier shall be, and hereby is appointed factor for the co-partnery, and is hereby empowered to take all obligations relating to the contribution to himself personally, and his successors in the said office of cashier and factor, to grant discharges with concurrence of any two of the said managers and trustees in ordinary; which shall be as valid as if signed by the whole contributors; with power to him in his own name, to settle all manner of actions competent, and to do everything in relation to the co-partnery, and for its behoof, as we might do ourselves, he still accepting to the trustees for the management, and they to the contributors.

5. That in place of the appraisers, as by the 10th art. of our said contract, there shall be yearly chosen by the plurality of voices present at the gen. meeting or proxies, as by the 14th art. with the alterations above exprest, as to the voters for the purposes mentioned in the art. And it is agreed, that their determination shall have the force of a Decreet-arbitral; and yearly at their election, they shall sign their acceptance of the office in this form: That they do accept, and as having God and a good conscience before them, they do promise to determine equitably in the things submitted to them, to the best of their knowledge.

6. That every person contributing after the 24 June, 1720, shall sign the orig. contract or art. together with their presents, before 2 subscribing witnesses; and shall give upon their subs. obligations to our said factor and cashier, and his successors in that trust, and that for ann. as well as for the full or capital prems.

7. It is agreed, That all certificates, bearing the tenements, etc., insured formerly issued by the directors, and that shall be in time coming issued by our trustees and managers, are and shall be burdened with the payment of the said obligations, granted to our said factor and cashier for the said prems.: and our trustees and man. are hereby empowered to call in all certificates formerly issued to the contributors that they may be renewed in the terms of this art.

8. We do hereby nominate and appoint Mr. Wm. Carmichael, etc., our trustees and managers in ordinary, and Sir Alex. Ogilvie, etc., our trustees and man. extraordinary, and Geo. Main, etc., our arbiters, to continue for this current year, to the next ann. meeting upon the 2nd Monday in Jan. next. And it is further agreed that all persons formerly signing, who pay ann. prems., as well as those who shall after 24 June, 1720, sign and pay only ann. prems., shall give obligations to the said cashier and factor, for the payment of their hail prems. in the terms of and under the burden contained in the art. thereanent, in the orig. contract or art.

9. It is agreed, That the art. of the managers, which are to be engrossed in the *Sederunt-book*,

shall hereafter be signed by the sec. and any two of the ordinary managers, in regard it is not thought proper to act any more by a preses.

1728.—The Town Council of Edinburgh granted the following charter of ratification, under date 18 March this year :

To all and sundry whom it effeirs, We, Archibald Macaulay, Esq., Lord Provost, Thomas Fenton, Alex. Simson, James Watson, and James Flint, Baillies; Patrick Lindsay, Dean of Gild, and James Donaldson, Treasurer of the City of Edin., with the Council, and Deacons of Crafts ordinary and extraordinary of the same, greeting in God everlasting :

Do hereby make known, That a petition having been presented to us by the *Friendly Contributors*, proprietors of houses within this city and its suburbs, etc., for ins. against losses by fire, setting forth the motives which induced them to make such a contribution, with the advantages that do thence arise to this city, and to the whole of this part of the U.K.; and therefore praying that the orig. and add. contracts and agreements entered into between them touching these matters might be by us ratified, approved and confirmed; and that they, with all others hereafter to be assumed by them, might be erected and established into a corp.; or body incorp. in deed and name, by the name and title of *The Edinburgh Friendly Ins. against Losses by Fire*, with a perpetual succession, and with certain powers and privileges herein after insert [the art. of agreement already given].

And due consideration thereof having been had by us, and we having carefully perused and examined their aforesaid orig. and add. contracts and proceedings had thereupon; and we having been fully persuaded and convinced that such a confirmation and erection do evidently tend to the advantage of this city, and to this part of the U.K.; the said undertaking being in itself laudable, legal, and just: We, in pursuance of the former power vested in us by our ancient Charters of Erection, and other Royal Charters of Confirmation, and sundry Acts of Parl. and practice in like cases, by our Act of Council of the date hereof, did ordain a seal of cause to be executed in the most ample form, with all usual and necessary clauses in their favour, for confirming of their aforesaid orig. and add. contracts and proceedings had thereupon; and for incorp. them in one body politick and corp. in manner hereinafter specified, as is more fully contained in the above, in part recited Act of Council, whereunto relation is hereby had; and therefore, pursuant to the aforesaid Act of Council, we do hereby ratify, approve, and confirm the orig. and add. contracts before mentioned, in every head, article, clause, matter, and thing therein contained, in so far as the same are not hereby altered and varied.—*Coun. Regis.* vol. li. p. 535.

This same year (1728) there was enacted the 1 Geo. II. stat. 2, c. 22—*An Act to explain the Acts of the 3rd and 9th years of his late Majesty's reign for continuing the duty of two penny Scots on every pint of ale and beer sold in the city of Edinburgh, in relation to the payment of petty Port Customs; and for the more effectual securing the payment of such money as hath been or shall be contributed towards a Charitable Fund for Relief of such as shall suffer by Fire in the said City, and the suburbs and liberties thereof*—which recites and enacts as follows :

IV. And whereas the houses and buildings in the City of Edin., and suburbs and liberties thereof, are much exposed to fire by reason of the nearness to each other and the height thereof, many families inhabiting under one and the same roof; and whereas for the relief of such persons as shall suffer by fire, many of the owners and proprietors of houses and buildings within the City, suburbs and liberties, have (with the consent and approbation of the Magistrates and Town Council of the said City) entered into mut. covenants and agreements to subject themselves to the payment of certain small sums (in proportion to the value and extent of their property) to create and estab. a General Charitable Fund or Stock for their mut. relief in case of accidents by fire, to be put under the directions and management of persons chosen by the contributors to such charitable fund, which by experience has been found to be much for the benefit and advantage of the said City, suburbs and liberties thereof, and will be much more useful and beneficial, if the bonds given or entered into by the contributors, as aforesaid, could be made a real charge upon such houses or buildings for which such contribution was made, without taking inseoffment, the expense whereof will in many cases exceed the sum mentioned in such bond.

Then follows a clause for securing the payment of money contributed for the purposes aforesaid. The word "charitable" used in the foregoing Act can hardly have been intended in the sense in which we now use the word.

1753.—Maitland, in his *Hist. of Edinburgh* pub. this year, from which we have drawn many of the preceding details, says :

This office being calculated for the mut. advantage of the contributors, they insure houses at the easy rate of four p. mille, or £4 *Scotish* yearly for every £1000 insured for the term of 20 years; or in lieu of ann. payment the sum of 100 marks *Scotish* prompt or down for every 1000 pound insured.

The affairs of this community are managed by 9 ordin. directors, 3 whereof attend alternately weekly, who are severally allowed half-a-crown for each day's attendance. There are likewise 18 extraordinary directors, who meet the former at quarterly meetings, and at other times when they think proper to summon them. To the Co. belongs a sec. who is likewise their clerk, and a number of able-bodied persons called firemen, for extinguishing casual fires.

Although the Asso. was founded upon the narrow basis we have stated, the bus. of the Asso. became so profitable that it much more than answered the purpose which those interested in its formation had in view; for after the payment of all claims for losses, the reserve, by judicious management, had accumulated to such an extent that after the expiration of 40 years from its foundation, it was resolved no longer to confine its operations to Edinb., but to extend them throughout Scotland, and upon every description of property, and on the principles adopted by the more modern offices.

1805.—The duty return of the Asso. for this year was only £2948 *or.* 3*d.*

1847.—The office continued in bus. under the same title for upwards of a century, but this year it merged into the *Sun*; and for a time in Scotland the joint title of *Sun and Friendly Societies Fire Ins. Co.* was retained.

FRIENDLY INS. SO. (MARINE).—This was a sort of illicit marine ins. so. in London formed in 1804 during the existence of the monopoly of the two chartered Corps, and worked upon the principle of mutual ins. like many of the marine ins. clubs of the present day. It is believed to have ceased bus. about 1824. [MARINE INS., HIST. OF.]

FRIENDLY LIFE ASSU. CO.—Projected in 1845, with a proposed cap. of £100,000, which however the pol.-holders were to have the power of paying off after the Co. had been in existence for 5 years, thereby rendering it a mut. asso. The prosp. said:

The F. L. has been estab. not only with the view of affording greater facilities and extending the benefits of life assu., but of also introducing several improvements in the system hitherto adopted.

Although these advantages are almost universally acknowledged to be not only interesting to private individuals, but materially conducive to national prosperity; it is surprising so few have availed themselves of the many benefits to be derived from them: there being scarcely one head of a family out of every 100 insured; while the number of paupers in receipt of parochial aid is 1 out of every 8 of the entire pop.

Persons with fluctuating incomes are frequently deterred from availing themselves of the benefits of life ins. under the ordinary system, which obliges them to provide an ann. payment throughout life, and which requires to be paid at particular dates: but which from unforeseen causes may be inconvenient. To obviate this objection, and to bring within the reach of all persons the benefits of life assu., combined with the advantages held out by savings banks or benefit sos., the directors propose to extend the benefits to that large and intelligent portion of the community called the industrial classes, whose labour has been the real source of our national greatness. By adopting prems. payable under T. which allow an option for a peremptory payment, *whereby the assured may pay when and what he pleases*, and has the privilege (when the pol. has been in force three years) of *withdrawing the whole or any portion of the amount deposited*: or should the pol. be in force for a longer period, he will receive, in add., whatever increase may have accrued upon the deposits—beyond the value of his share in the profits should the pol. be on the parti. scale—or the Co. will advance him the amount on loan, *to be paid off at his convenience*, or deducted from the sum assured payable at death.

The directors of the F. L. Assu. Co., availing themselves of all the numerous and authentic sources of information which have recently been supplied, have caused an orig. and extensive set of T. to be constructed; the rates having been carefully adjusted according to the nature of the contingencies intended to be provided for, and adjusted to suit the circumstances and convenience of every class of pol.-holders.

On the prosp. were the names of Wm. Borrow, Sec.; Jenkin Jones, Consulting Act.; and Hector Gavin, M.D., Medical Officer. It is fortunate that the promoters never obtained any money from the public on the terms hereby offered.

FRIENDLY SOCIETIES.—Friendly Sos. are in many respects so analogous to Ins. Asso.—are in fact frequently ins. asso.—that they have to be considered as coming within the scope of our work.

When asso. of this description were first founded, is involved in some obscurity. The earlier asso. partook much of the nature of Gilds—from which it may fairly be assumed they originated—and gilds, as we know, are of very great antiquity. [GILDS.]

It is certain that asso. partaking in many essential particulars of the nature of Friendly Sos. existed something like three centuries before the Christian era: how much earlier we know not; and we need not follow writers who claim for them a higher antiquity. As we cannot hope personally to discover any additional facts regarding these earlier fraternities, we propose to avail ourselves of the outline of a *Lecture on the Friendly Societies of Antiquity*, delivered a few years since by Mr. H. Tompkins, for many years associated with the late Mr. J. Tidd Pratt, during his office of Registrar of F. Sos., and who had carefully investigated the subject.

Most of the early societies of which we have any knowledge were, he says, connected with the religious services paid to the gods in the temples; in addition to this, some of them had for their object to aid the members in the pursuit of a particular profession; they then formed industrial, maritime, or commercial corporations, like our ancient gilds of trades; some were like the semi-religious gilds, under the patronage of a tutelary saint, which are found at this present time in connexion with many Roman Catholic churches on the Continent. The meetings of these ancient societies opened with prayer, after which came the general business. The place at which they were held was called a *synod*, or sometimes a *synagogue*, and the assembly was absolutely secret—no stranger could be admitted; a severe code maintained order thereat. They were held, it appears, in inclosed gardens, surrounded with porticoes, or piazzas, or little harbours, and in the middle of which the altar of sacrifice was erected. The officers made the candidate for membership submit to a sort of examination, and they had to certify that he was "holy, pious, and good."

There was in these little confraternities, during the two or three centuries that preceded the Christian era, a movement which was almost as varied as that which produced in the middle ages so many religious orders, and so many subdivisions of these orders. No fewer than 19 have been counted in the single island of Rhodes, of which several bear the names of their founders, or of their reformers. Several of these confraternities, especially that of Bacchus, had sublime and elevated doctrines, and endeavoured, with a good will, to give to mankind some consolation. If there still remained in the Greek world any love, any piety, any religious morality, it was owing to the liberty granted to such private religious doctrines. These doctrines competed, in some measure, with the official religion, the decline of which became more evident day by day.

These sos. were sometimes called *Thiaset*, and sometimes *Eranes*. The word *Thiaset* is derived from the Greek word *thiaso*, which means to lead a chorus, or to dance, whence came the word *thiastoi*, referring to those who formed a so. and exercised themselves in ch. us-singing, but more frequently it is used of those who, on the pretext of the sacrifices and the worship of the gods, met together as members of a society on the festival days of the gods, and indulged in feasting. *Erane* is derived from *eranos*, which

signifies a contribution or a collection, especially for a feast. It also means money. It is from the same source as the word *eranizomai*, meaning, "I beg an alms," also to collect or get together alms.

Let us now consider what these *cos.* were which are called by the names of *Eranes* and *Thiasos*, and of which the following and other inscriptions have revealed the number and importance. These *cos.* were formed of members who met together to sacrifice to certain divinities, and to celebrate their festivals in common; besides this, they assisted the members who fell into necessitous circumstances, and provided for their funerals. They were at once religious asso. and F. sos.; sometimes they partook of a political and commercial character. These private corporations (recognized by the State) had their laws, their presiding and other officers, their priests, their funds supplied by the contributions of members and the liberality of benefactors. They assembled in their sanctuary and made decrees. They were found in great numbers in the important cities, and especially in the maritime ones. At *Rhodes*, for example, there were the "Companions of the Sun," the "Sons of Bacchus," of "Minerva Lindienne," of "Jupiter Atabyrius," of "Jupiter the Saviour." At *Athens* (or rather at the *Piræus*) there were the "Heroists," the "Serapistes," or co. of the worshippers of the God *Serapis*, the "Eranistes," the "Orgeons," and lastly, the "Thiasotes."

One of these inscriptions has been translated by M. Wescher. Its date cannot be fixed with certainty, but there is, however, good reason for placing it about the commencement of the third century before Christ. The translation is as follows:

It has been proposed—seeing that *Menis*, the son of *Mnesitheos*, of *Heraclea*, is full of good will towards the *Thiasotes*, and of zeal for the temple—that at present being treasurer appointed under the archontate of —, he has fulfilled that charge with zeal and honesty, that he has finished the portico and the front of the temple of *Jupiter Labraundos* in a manner worthy of the god, that he has managed the common funds with honesty and justice, and that for all the *Thiasotes* he has been irreproachable both before and after taking office as treasurer, that he has not hesitated to add his own money towards the expenses of the temple, showing thus, in an evident manner, the good will that he has for the *Thiasotes*, and that he has exercised the sacerdotal office in a manner worthy of the god. For all these things the *Thiasotes* have decreed to award a vote of thanks (or eulogium) to *Menis*, son of *Mnesitheos*, of *Heraclea*, to crown him with a chaplet of foliage, to consecrate in a part of the temple where it will be best seen his likeness, painted on a piece of wood, according to law, in order to show to all those who wish to prove their zeal towards the temple what honours they may obtain, each one, according to the good they are liable to do for the *Thiasotes*, to engrave this decree on a stone tablet, and to place it in the temple of the god.

(Above the inscription is the crown or chaplet.)

The treasurer's office, if not the highest, was at least one of the most important in these *cos.*, as the inscriptions prove which speak of their financial embarrassment, and of the liberality of benefactors who came to the succour of the common fund. The members showed but little zeal in the payment of their contributions—first, because the funds were expended on lawsuits, which were frequent, and were sometimes unfortunate (but what these lawsuits were about does not appear); and secondly, because the expenses of the sacrifices and festivals left but little money for other expenses. There is a second mention of the honesty and justice of *Menis* in the management of the common fund, adding, however, that none of the *Thiasotes* had to complain of him. That means prob. that he was not too rigorous in exacting the contributions from the members, and that he finished the building without imposing extra contributions on them. To provide for the necessities of the *so.*, and at the same time to spare the members' pockets, *Menis* had generously furnished, from his own resources, the funds for the expenses of the sanctuary.

It is a rather strange sight, says Mr. Tompkins, to see a man charged with administering a common fund, assist it out of his own pocket; "but it was a common occurrence among the Greeks, and especially in these associations."

The second part of the decree relates to the honours to be paid to *Menis*—namely, a vote of thanks (or eulogium), and a chaplet or a crown of foliage. We learn from another inscription that the crown, or chaplet, was placed by the priest while officiating, at the moment that the *Thiasotes* sacrificed and made their libations; at the same time, he had to declare the reasons why the reward was given; if he omitted this, he was liable to a fine.

The expression "according to law" may mean according to the society's rule, which prob. regulated the recompenses to be awarded to benefactors; or it may allude to the laws of the State. These *cos.*, by their philanthropic organization, as well as by their mystic and religious character, make us think of an institution that we are inclined to suppose exclusively modern. Each association possessed a common fund with two sources of revenue—namely, donations of benefactors and the regular contributions paid personally by the members. The amount of the contributions appears to have been about 3 drachmas per year, or about 3 days' wages of a labouring man, and the member who refused to pay was excluded the *so.*, provided he was not excused on account of indigence or sickness. The members, or "eranistes," celebrated certain *fêtes* in common, and had meetings for sacrifices and banquets, while they also mutually assisted each other in time of need.

The member who met with a reverse of fortune received assistance from the common fund, with the understanding that he was to repay what had been advanced to him if fortune should prove favourable again. The members met in a common assembly to deliberate,

and their resolutions, which were engraved on tablets, placed in the sanctuary, were the archives of the order. Women were present at these meetings. We know this by an Athenian inscription, and by two marbles discovered in the isle of Santorin. The rules, which still exist, to prevent disorderly conduct forbid severely any tumult, and condemn the offender to fines. At the head of the so. was a certain number of dignitaries chosen by lot, except the president, who was elected, and forming a "clergy" in the etymological acceptance of the term (Greek *klerotes*; Latin *clerus*).

He next proceeds to consider the asso. of the class referred to as they existed at Rome, and under the empire. At Rome (quoting M. Renan) they found greater difficulties, and not less favour with the disinherited classes. The principles of the Roman policy on the subject of confraternities had been promulgated, for the first time under the Republic, 186 years before Christ, on the affair of the Bacchanals. The Romans, by natural taste, were very favourable to asso., and especially to religious asso.; but these species of congregations were displeasing to the patricians, the guardians of the public powers, who in their narrow conception of life, only admitted the family and the State as the proper social groups. The most minute precautions were taken, such as—authorization was required before commencing, limitation of the number of members, forbidding the appointment of a permanent *magister sacrorum*, or president, and also the raising of a common fund by means of subs.

A Roman inscription found at *Lanuvium*, about 19 miles from Rome, informs us that the so. referred to on the tablet was an assemblage of the worshippers of Diana and Antinous. Among the rules it appears that it was provided that an amphora of good wine was to be presented to the club by a new member, the sum of 100 sesterces (about 15s.) to be paid as entrance money, and five asses (little more than twopence) per month as subs. The meetings were not to take place oftener than once a month. If any one omitted payment for — months, no claim could be made, even though he had directed it by will. In case of the death of one who had paid his subs. regularly, 300 sesterces (£2 5s.) were allotted for his funeral expenses, out of which, however, fifty were to be set apart for distribution at the burning of the body. The funeral was to be a walking one. If a member died more than 20 miles from Lanuvium, and his death was announced, three delegates from the so. were to repair to the place where he had died to perform his funeral, who had to render an account of it to the members. Fraud was to be punished by a fourfold fine. Twenty sesterces each were to be allowed the delegates for travelling expenses, going and returning. If the death had taken place at more than 20 miles from Lanuvium, and no notice had been sent, the person who had performed the funeral was to send a sealed certificate, attested by seven Roman citizens, in the production of which the usual sum for the expenses was to be granted. If a member had left a will, only the heir named in it could claim anything. If he died intestate, the *quinquennales* or magistrates of the municipium, and the members generally, were to direct how the funeral should take place. If any member in the condition of a slave should die, and his body, through the unjust conduct of his master or mistress, should not be given up for burial, his funeral should be celebrated by his bust being carried in procession. *No funeral of a suicide was to take place.* In addition there were many other rules for the preservation of order and good fellowship. There is little room for doubt that many of the rules found among the regulations of this so. at Lanuvium were common to others in Greece and elsewhere, formed for the accomplishment of similar objects.—*Vide Kenrick's Roman Sepulchral Inscriptions.*

The connecting links between the sos. here referred to and those of more modern times will be found in our art. GILDS.

It may be mentioned in this connexion that a claim has been put forward on behalf of the *Loyal Ancient Independent Order of Odd Fellows* of having been founded A.D. 55, in the reign of the Emperor Nero! We have never seen any attempt to trace the pedigree of the Order downwards. We turn to the still more ancient order, *The Antediluvians*, with a like result. And yet, as an able modern writer has pointed out [Q. R. Oct. 1864, p. 321], it is nevertheless a curious fact that so large a proportion of what are called the Secret Orders denominate themselves "Ancient." Thus there are the Ancient Order of Foresters, the Ancient Druids, the Ancient Mariners, the Ancient Britons, the Ancient Fraternity of Gardeners, the Loyal Order of Ancient Shepherds, the Ancient Order of Buffaloes. But there are still other Orders more intimately associated with the traditions of the East, as the Order of the Ark, the Order of the Ancient Romans, the Rechabites and Templars of Nazareth (teetotalers), the Order of the Golden Fleece, the Order of the Peaceful Dove, the Knights Templars, the Most Noble Order of the Knights of Malta, Star of the East, and some others which we do not now recall. Many of these names have descended to our time through the medium of the Gilds; in this sense alone do they bear the stamp of antiquity. Most of the Orders named are really of modern organization, and will be spoken of in their chronological places in more detail.

9TH TO 11TH CENTURIES.—The Gilds of the Anglo-Saxon period contained provisions regarding the funerals of their members. The surviving members were not only to contribute to the cost, but were to attend in person, as is the custom now in many F. Sos.

14TH CENTURY.—The following were among the rules of the St. Catherine's Gild,

founded in *Coventry* in the reign of Edward III.: 1. If a member suffer from fire, water, or robbery, or other calamity, the Gild is to lend him a sum of money without interest. 2. If sick or infirm in his old age, he is to be supported by the Gild according to his age. . . . 5. Those who die poor, and cannot afford themselves burial, are to be buried at the expense of the Gild.

The rules of a gild estab. in the city of *Exeter* at this period provided that if a member were going abroad, each fellow member should contribute 5*d*. If any member's house should be burned, they were to contribute each a penny. [GILDS.]

1560.—There was founded at *Leith* about this date the *Friendly So., or Incorporation of Carters*. This we believe was previously a gild; but prob. losing some of its privileges reconstituted itself into an Asso. in the nature of a F. So., as some other fraternities have done. (See 1694.)

1623.—There is preserved in the Record Office, Fetter Lane, the "Examination of Mich. Constable of West Raisen, Lincolnshire, relative to the origin of the order of the 'Bugle' in Newport, Isle of Wight, on their voyage to Spain," from which the following details are obtained. They formed themselves into a F. So. called the *Bugle*, and on their return met with another so. called *Tityre*, with whom they had friendly intercourse; 40 more joined their co. They had officers, colours, and a general fund, but no articles of agreement. Then there is recorded the names of the orders of "Tityre" and the "Bugle" and the names of those of the order of the "Blew"; being a list of knights and gentlemen, some of whom were, and some were not, at the supper, but of the colour.

It will be remembered that the "Bugle" is still the name of the principal hotel at Newport.

1634.—In the town of *Borrowstounness* there was founded at this date a F. So. in the old form, viz. *The General Sea Box*; while in 1659 the *Landsman's Box* was estab. And even their rules are supposed to have been founded upon the model of similar inst. of a still earlier period. In a Rep. by one of the Assistant Commissioners (Mr. E. Lynch Daniell) under the F. Sos. Royal Commission, 1870, the following observations are offered regarding these early asso.:

The above town, usually called Bo'ness, from its geographical position, its good harbour on the Frith of Forth, and the collieries in its neighbourhood, was the seat of a flourishing trade with the Baltic and other foreign ports as early as the beginning of the 17th century. This traffic seems to have given birth to an amount of prosperity which was in Scotland at this period very exceptional: leading to the formation of a group of half a dozen Sos., two of which may claim to be, if not the oldest, amongst the very oldest F. Sos. in the 3 kingdoms—although there is no ground for supposing that the F. So. in its present form of a combination to secure an allowance during sickness, a sum at death, and in some cases an allowance in old age, had any existence a couple of centuries ago.

The oldest of the 6 Sos. in Bo'ness—*The General Sea Box*—dates in fact as far back as 1634; and the *Landsman's Box* to the year 1659. The others are: *The Shipmasters' So.*, instituted 1738; *F. So. of Shipmasters*, 1757; *Beneficent So.*, 1781; *The Bo'ness Provident Union So.*, 1824. The first 4 of these Sos. have been joined into one, under the name of the *United Gen. Sea Box*. The two last still exist as separate Sos.

On learning the extreme antiquity of the two first of these Sos., I was very desirous of obtaining, if possible, some record of their early hist. But the letters sent to the Secs. remained unanswered. There is nothing in the present constitution which throws any light upon either the special purpose for which they were started, nor upon the amount and nature of their contributions at that early period. . . . The objects of the *United So.* are "to give its members an allowance during sickness and infirmity until 60 years of age, and an allowance to members when shipwrecked and total loss of ship occurs. Funeral money at the death of a member, or his wife, or widow; and an annu. to members above 60 years of age, and to widows and children." Members must be above 15, and not above 40 years of age, and Protestants. Funds in hand £6000.

1685.—The formation of Protestant Refugee Sos. in Gt. Brit., after the Revocation of the Edict of Nantes, this year, appears to have rendered the estab. of F. Sos. more general; as it also indicates familiarity with similar asso. in *France* at this period. The rules of one of these refugee sos. commence:

Whereas in the reign of Louis XIV., King of France, the Protestants in his dominions were cruelly persecuted, and many obliged to take refuge in this country: in particular at that famous epoch, the Revocation of the Edict of Nantz, when all Protestant churches in France were demolished, in particular the Temple of Charenton, near Paris. About 2 years after which a number of Parisians, late members of the said Temple, being refugees in London, formed the laudable resolution to raise a so., in order to estab. a fund for the mutual relief of each other, which they then did under the title of the So. of Parisians. But in process of time, there not being sufficient persons of the above description to support the said So., it was then deemed necessary to make it free for Protestants of all nations, which it now is, under the title of Friendly So.

This was in 1703. Another code of rules of later date commences:

Know all men whom it may concern, that in the year 1763 Jacob Winckler, Johan Conrad Kranshoar, Christopher Behn, Johan Christian Ledebuhr, Jacob Schlumberger, Ulrich Gros, Johan Andreas Muller, Jacob Engeback, Elias Schenck, and Joseph Dansy, weavers, did agree to unite, and form themselves into and estab. a Benefit or Friendly So., for the purpose of raising, from time to time, by the contributions of its members, a stock or fund for the mutual relief or maintenance of its several members during sickness, and a limited pension or superannuation allowance in old age or infirmity, etc.

The following sos. of this same class were in existence in London in 1857:

"The Norman So." estab. in Bethnal Green in 1703.

"The So. of Protestant refugees from High and Low Normandy" founded in the same parish in 1764.

"The So. of Picards and Walloons" estab. in the same parish in 1765.

"The So. of Lintot," that being the name of a small part of Normandy whence the original members emigrated.

According to the statement of the sec. of one of these sos., the use of the French language amongst the members, which in former times was common, is now almost lost; and they find it difficult to keep up the number of members from the limited number of persons who in these days can be considered as Protestant refugees, or who can trace their descent or family connexion with them or their descendants.—*Vide 3rd Rep. of Reg. of F. Sos.* p. 20.

1694.—The *Fraternity of Fellowship Porters* in Edin., who had prob. previously constituted a separate gild, were by the regulations of the city united with the So. of "Trone-men," in view of their receiving from the last-named So. an allowance during sickness in respect of a fixed ann. or other contri. to be made. The working of this scheme became the subject of complaint in 1738, when a new scheme was made. (See 1738.)

The first F. So. of modern form founded in France dates from this year. We have already shown, in our art. FRANCE, that these asso. originated in the Religious Asso. or Gilds, so general in that country. (See 1685 and 1805.)

1697.—In De Foe's famous *Essay upon Projects*, pub. this year, there is a proposal for founding a "Pension Office," which in reality comes, in some of its main features, within the scope of what is understood by a modern F. So. His scheme was:

That an office be erected in some convenient place, where shall be a sec., a clerk, and a searcher, always attending. That all sorts of people, who are labouring people and of honest repute, of what calling or condition soever, men or women—beggars and soldiers excepted—being sound in their limbs, and under 50 years of age, shall come to the said office, and enter their names, trades and places of abode, into a regis. to be kept for that purpose, and shall pay down at the time of the said entering, the sum of 6*d.*, and from thence 1*s.* p. quarter; shall every one have an assurance, under the seal of the said office, for these following conditions.

1. Every such subs., if by any casualty (drunkenness and quarrels excepted) they break their limbs, dislocate joints, or are dangerously maimed or bruised, able surgeons appointed for that purpose shall take them into their care, and endeavour their cure gratis.

2. If they are at any time dangerously sick, on notice given to the said office, able physicians shall be appointed to visit them, and give their prescriptions gratis.

3. If by sickness or accident, as aforesaid, they lose their limbs or eyes, so as to be visibly disabled to work, and are otherwise poor and unable to provide for themselves, they shall either be cured at the charge of the office, or be allowed a pension for subsistence during life.

4. If they become lame, aged, bedrid, or by real infirmity of body (the venereal excepted) are unable to work, and otherwise incapable to provide for themselves, on proof made that it is really and honestly so, they shall be taken into a college or hospital provided for that purpose, and be decently maintained during life.

5. If they are seamen and die abroad on board the merchant's ships they were employed in, or are cast away and drowned, or taken and die in slavery, their widows shall receive a pension during their widowhood.

6. If they were tradesmen and paid the parish rates, if by decay and failure of trade they break and are put in prison for debt, they shall receive a pension for subsistence during close imprisonment.

7. If by sickness or accident they are reduced to extremities of poverty for a season, on a true representation to the office, they shall be relieved as the governors shall see cause.

He argues in support of his project as follows:

Want of consideration is the great reason why people do not provide in their youth and strength for old age and sickness; and the ensuing proposal is in short only this: that all persons in the time of their health and youth, while they are able to work and spare it, should lay up some small inconsiderable part of their earnings as a deposit in safe hands, to lie as a store in bank, to relieve them, if by age or accident they should come to be disabled or incapacitated to provide for themselves; and that if God bless them, that neither they nor theirs come to need it, the overplus may be employed to relieve such as shall.

1703.—Mr. Tompkins, in a paper; *An Account of some remarkable F. Sos.*, read by him in 1871—under which date it will be more particularly noticed—speaks of a F. So. which was estab. in Lond. this year, and which was, when he wrote, in its 167th year of existence. Its records had been regularly kept since 1730.

1708.—Another so., estab. in London this year, was in existence in 1866, having then 46 members, with funds in hand of about £40 p. member.

1715.—The oldest Friendly So. in Gt. Britain which Mr. Ansell could trace, some years since, was one estab. by the tobacco-pipe makers this year. That So. was in existence in 1848. The next in chronological succession was founded 70 years later, *vide* his evidence before Parl. Committee 1848. But Mr. Ansell did not include in his search those Protestant Refugee Sos. of which we have already spoken. That many Friendly Sos. were founded in Gt. Britain during the 18th century will appear clear as we proceed. Probably many of the ancient gilds also assumed this more modern form during this century.

1719.—There was founded in *Newcastle-upon-Tyne* this year a F. So. of Shoemakers. The subs. was 1*s.* payable every 6 weeks; and 6*d.* extra each for the funeral of a deceased member. Allowances 6*s.* a week for 1 year; afterwards 3*s.* 6*d.* till well. This was the allowance to superannuated members. No person allowed to work while on the funds. No printed rules. In 1776 the So. consisted of 99 members, with accumulated funds of £108 4*s.* 8*d.* Two deaths occurred that year. In 1796 there were 160 members; the funds were £350. There were 4 deaths that year.

1728.—There was pub.: *A Method for the Regular Management of those Sos. call'd Box Clubs: laid down in such plain and easy terms, as observ'd, will settle and preserve the*

tranquillity of the So., instruct the ignorant, satisfy the curious, and maintain a just Economy among friends and acquaintance, who mutually agree in these proceedings, which are no less an advantage to the public than a true sign of the spirit of humanity. To which is added, A Copy of Orders abstracted from the most regular sos. in London, with proper remarks, advantageous proposals and methods for security for the Box: forms of bonds for money lent out, and several useful observations for the benefit of sos. in general, and every member in particular. The writer says:

It is the opinion of several of His Majesty's Justices of the Peace that there never was a more advantageous scheme drawn by industrious handicraft tradesmen, than by raising of those sos. call'd Box Clubs, which not only keep some hundreds in a year from being burdensome to the several parishes within the B. of Mort., but give private men a public spirit. By an obs. of the calamities and disasters which daily happen amongst such a community of men, it necessarily stirs them up to a value for this constitution, by seeing others in a bed of sickness, and gives them a view of providence, by a support that is provided for the industrious.

This is an ably-written pamph., but we cannot follow the writer further. See Box Sos. 1738.—We have seen how, in 1694, the *Fraternity of Fellowship Porters* in Edin. was placed in reference to sick allowances, etc., under the jurisdiction of the So. of Trone-men of the same city. Maitland, in his *Hist. of Edin.* (1753), records as follows:

The porters and workmen of Edin. being greatly imposed upon by the So. of Trone-men in this City, who, pretending a jurisdiction over them, extorted from each the sum of 2s. stg. yearly, which they applied to their own use, without showing the least regard to the said Porters in sickness, or burying their poor. Whereof the said Porters petitioned the Common Council, that they might be freed from the slavish oppression and exactions of the Co. of Trone-men; and to have liberty granted them to meet at certain times, and to have a box of their own for the use of their poor.

The above petition being referred to a Committee, rep. was made setting forth the great grievances and hardships imposed on the said Porters, as aforesaid; and in view of remedying the same, presented (*inter alia*) the following regulations to the Town Council for their approbation and confirmation:

That the said porters and workmen may be the better enabled to assist their sick poor, their widows or children, or bury their dead, they might be allowed to keep a box of their own, whereinto every person who shall be admitted to work and labour as Porters within this City, shall on or before his admission, pay into the said box for the use above mentioned 2s. 6d. stg.; and that every person of the said porters and workmen shall pay into the said box quarterly, for the use aforesaid, 6d. stg.; and that there be two keys to the said box, one whereof to be kept by Lachlan Ratray, and the other by any of their number they shall appoint.

All of which was confirmed by the Magistrates and Council, "with the deacons of crafts ordinary and extraordinary"; and thereafter the Fellowship Porters Fraternity became a F. So., and we believe so remains. [See GILDS this date.]

1750.—The *Edin. Journeymen Goldsmiths So.* was founded this year; its members being limited to goldsmiths, silversmiths, seal-engravers, silver-engravers, and lapidaries. It was found on an investigation of its affairs, in 1825, by Mr. James Skirving, accountant, Edin., that the sickness experienced by its members had been about the same as that indicated by the Highland So.'s T.; but that the duration of life had been considerably below that indicated by the same T. [See 1825, when a new so. for the same class of persons was instituted.]

1752.—The Rev. T. Alcock pub. *Observations on the Poor Laws*, wherein he makes reference to the existence of several confraternities after the manner of F. Sos., consisting of tradesmen and manufacturers, especially in the West of Eng.

1757.—We reach an important phase in the hist. of F. Sos., which is no other than an attempt on the part of the Gov. to make such sos. compulsory, at least as to certain classes of persons. Thus the 31 Geo. II. c. lxxvi. (local and personal)—*An Act for Relief of Coalheavers working upon the River Thames; and for enabling them to make a provision for such of themselves as shall be Sick, Lame, or past their labour, and for their Widows and Orphans*—recites and enacts as follows:

4. Whereas many of the labourers now exercising the bus. of unloading coal-ships and vessels, have voluntarily agreed to set apart 2s. in the £ out of all their future earnings, to erect and keep a perpetual fund, sufficient to answer the extraordinary expenses that will necessarily attend the regulation hereby estab.; and also for enabling them to provide a competent subsistence for labourers that shall fall sick or lame, and for such as shall be grown old and past their labour, or be disabled from working by any other unavoidable accident; and also for the support of the widows and orphans of deceased labourers; and a provision for the burial of their dead; which expenses now generally fall heavy upon the parishes to which they respectively belong: be it therefore enacted by the authority aforesaid, That the person or persons to be appointed for stationing the labourers registered as aforesaid, and paying them their wages as aforesaid, or such other person or persons as the said Alderman [one of the Aldermen of the City of Lond.] shall think proper to appoint for that purpose, shall at all times hereafter retain at the rate of 2s. in the £ out of the earnings of all and every such labourer and labourers, who shall be regis. as aforesaid, to constitute the fund above mentioned: out of which, after payment of the necessary expenses incurred in and about the obtaining and passing this Act, all salaries to the several persons to be employed by the said Alderman as aforesaid, and all other necessary expenses attending the regulation hereby estab., shall be paid and discharged; and the remainder thereof shall, from time to time, be applied to the charitable uses aforesaid in the proportions hereinafter mentioned, if such fund shall prove sufficient to answer the same: that is to say, to every labourer who shall be sick or lame, or rendered incapable of working by any other unavoidable accident, the sum of 7s. p. week during the time he shall remain under such incapacity; to every labourer who shall be rendered totally incapable of working through old age, the sum of 6d. p. day during the remainder of his natural life; for the Burial of every labourer not having sufficient effects to defray the expenses of his funeral, over and above the goods or furniture of his house or lodging, the sum of 40s.; to the Widow of every labourer the sum of £5; and towards making some provision for every Child of a deceased labourer, being under the age of 10 years at the time of his

death, the sum of 40s. And in case the said fund shall at any time hereafter prove insufficient to answer the full sums herein above appointed for each of the charitable donations aforesaid, then, and in such case, an abatement shall be made in proportion out of each of the said several sums specified. Provided always, that the several payments last above mentioned shall not take place and be made (the burial of the dead only excepted) till the expiration of one whole year.

This Act was repealed in 1770, by 10 Geo. III. c. 53, "having been found ineffectual to answer the purposes thereby intended"; frauds having been committed, etc. (See 1792.)

1762.—The prosp. of the *Equitable So.*, issued on its foundation in 1762, said :

There are many other persons of great importance to the community, viz. artificers, manufacturers, and others who support themselves by their labour; many of whom would gladly continue to their families, after their own decease, a portion of those benefits which their labour, whilst living, was used to procure for them: accordingly we find, that *great numbers of such persons have formed themselves into little sos. in all parts of the kingdom, in order to make some provision for themselves in time of sickness, and for their families after their death.*

1771.—Dr. Price, who it is known took great interest in, and rendered considerable service to various inst. of a provident class, said in his *Observations*, etc., clearly pointing to F. Sos.:

The lower part of mankind are objects of particular compassion, when rendered incapable by accident, sickness, or age, of earning their subsistence. This has given rise to many very useful sos. among them, for granting relief to one another, out of little funds supplied by weekly contributions.

He then lays down the following scheme for a small F. So. which he considered "would prob. thrive":

Let the so. at its first estab. consist of 100 persons, all between 30 and 40; and whose mean age may therefore be reckoned 35; and let it be supposed to be always kept up to this number by the admission of new members, between the ages of 30 and 40, as old members die off. Let the contribution of each member be 4d. per week, making from the whole body an ann. contribution of £85 17s. Let it further be supposed that 7 of them will fall every year into disorders that shall incapacitate them for 7 weeks—£10 12s. of the contribution will be just sufficient to enable the so. to grant to each of these 12s. p. week during their illnesses. And the remaining £55 p.a. laid up and carefully improved, at 3½ p.c. will increase to a cap. that shall be sufficient according to the chances of life . . . to enable the so. to pay to every member *after* attaining to 67 years of age, or upon entering his 68th year, an annu. beginning with £5, and increasing at the rate of £1 every year for 7 years, 'till at the age of 75 it came to be a standing annu. of £12 for the remainder of life.

Were such a so. to make its contribution 7d. p. week, an allowance of 15s. might be made, and on the same suppositions, to every member during sickness; besides the payment of an annu. beginning with £5 when a member entered his 64th year; and increasing for 13 years, till, at 79, it became fixed for the remainder of life at £20.

He adds: "If the prob. of life are lower among the labouring poor than among the generality of mankind, this plan will be so much the more sure of succeeding."

This was prob. the first attempt which was made to fix the rate of contributions by the members of F. Sos. with some regard to the benefits to be received. (See 1789.)

1772.—A great number of F. Sos. were estab. in various parts of Gt. Brit. in this year.

1773.—The Baron Maseres, among the many good things he did, this year pub. a pamph.: *A Proposal for estab. Life Annu. in Parishes for the Benefit of the Industrious Poor.* His scheme in brief was that the churchwardens and overseers of every parish be empowered by Act of Parl. to grant annu. to such of the inhabitants of such parish as should desire to purchase the same; and that all such annu. granted be a charge upon the poor-rates of the parish. That 3 p.c. int., or upwards, be the rate of int. employed in the calculation of the annu. That no annu. exceeding £20 be granted on any one life. That no less sum than £5 be allowed to be employed in the purchase of an annu. That a register of all annu. granted be kept by each parish. That the churchwardens and overseers invest the money they receive in the purchase of 3 p.c. Bank Annu. The scheme was taken up by Parl. and passed the Commons; but was rejected by the Lords. *The effect of its discussion was to awake considerable interest in the subject of F. Sos.* A more complete outline of the proposal will be given under POOR, INS. FOR THE.

1782.—About this date Capt. Thomas Gilbert, M.P., paid much attention to F. Sos. in connexion with his various proposals to legislate for the poor. It was part of his orig. plan to encourage F. Sos. by occasional relief from the poor-rate. For this purpose he proposed to enact, that in all cases where F. Clubs or Sos. had been estab., under such rules, orders, and regulations, as should be approved by the County Committee (in view of which approval the rules were to be forwarded to this Committee by the principal officer of the Club), the Committee should have power to order such sum as they should think proper, not exceeding 1s. p. week, to be paid to every poor person who should have contributed to the fund belonging to the so., whereof he had been a member for a number of years, to be determined upon; so long as such poor person should, from sickness, lameness, or other infirmities, by the rules of the said so. be entitled to a weekly allowance out of the funds of such so.; and should direct the same to be paid by their treasurer, out of the casual or contingent fund, arising from a tax on dogs, Sunday tolls, and fines, amercements and recognizances, taken and laid by Justices of the Peace, or in courts of assize, gaol delivery, or quarter sessions in each county.

He likewise proposed, as a further encouragement to F. Sos., that as soon as any new club or so. should be estab. consisting of 100 members or more, and the rules and orders made for the gov. of them should be transmitted to, and approved by, the County Committee, they might direct their treasurer to pay to the steward of every such so. any sum they should think fit, not exceeding a limit to be agreed upon, or having security given for the due application thereof in aid of the benevolent purposes of such so.

And in order to render the rules of F. Sos. effective and compulsory on the members, he proposed, that after the rules were confirmed by one of H.M.'s Judges of Assize, power should be given to the president or other person at the head of a F. So. to enforce the payment of fines and penalties incurred by members for a breach of rules; and to recover funds belonging to the so. from all persons retaining the same by summary process. (See 1787.)

The system of offering bounties for the estab. of F. Sos. as here advocated bore resemblance to the system in operation in *France* [FRANCE, sub-heading *F. Sos.*]. It never was adopted by the Brit. Gov., and, as Sir F. M. Eden remarks, "the necessity does not as yet seem to have been satisfactorily demonstrated;" nor the extent of the expenditure (if commenced) foreseen.

In this connexion it must be mentioned that some of the local agricultural sos. had about, or before, this date given prems. for the estab. of F. Sos. The Bath Agricultural So. imposed the following condition: "That no so. shall be entitled to this prem., unless there be a clause inserted in their art., that no part of their stock shall ever be laid out in the purchase of *lottery tickets* or in any other way which may risque any part of their property in games of chance."

The 33 Geo. III. c. 54 embodied many of Mr. Gilbert's recommendations. (See 1787 and 1793.)

1783.—There were included in the *Bath Papers*, etc., pub. this year [vol. iii. art. 50], the two following: 1. *An Account of the Good Effects of a F. So. at Devizes*, by John Anstie of Devizes. 2. *On the Advantages of F. Sos. among Handicraftsmen and Labourers*.

1786.—The Rev. John Acland pub. in Exeter: *A Plan for rendering the Poor independent on Public Contributions, founded on the Basis of the Friendly Sos., commonly called Clubs*. His scheme was to enable the poor to maintain themselves, by subscribing a small portion of their earnings to a general or national so., to be constructed by the authority of Parl. The subs. were, however, to be compulsory, except in certain specially excepted cases. We shall give a more complete outline of the scheme under POOR, INS. FOR THE.

1787.—The Rev. Joseph Townsend pub. 2nd ed. of his *Dissertation on the Poor Laws, by a Well-wisher to Mankind*, wherein he proposed to make F. Sos. universal and compulsory; proposing as a regulation, that an unmarried man should pay a fourth part of his wages, and a married man, with 4 children, not more than a thirtieth part, and that no man should be entitled to parochial relief who was not a member of a F. So. With other suggestions upon the subject.

During this year Capt. Thomas Gilbert, M.P., who had long taken an active interest in regard to measures for the relief of the poor, and who had also promoted several Bills upon the subject [see 1782], introduced some new proposals for dealing with the poor on a national plan. It was one of his proposals that the district committees, whom he proposed should be appointed for regulating the expenditure in relation to the poor, should have the power of applying such sums as it thought proper towards paying the weekly contributions of such of the poor as were members of clubs and F. Sos. while out of work, and therefore unable to keep up their payments against the contingencies of sickness and accidents.

1789.—During this, as also in the preceding year, the attention of Parl. was much occupied with the consideration of the Poor Laws, and various schemes were propounded—or having been previously propounded, were brought under consideration—in view of lessening or altogether removing the burthen of the poor-rates. F. Sos. were looked upon very favourably in this connexion. It was the belief of many philanthropic persons of that period that a national scheme of contribution and relief might be devised upon the plan adopted by F. Sos.—except that the contribution must be *compulsory*. The several schemes submitted will be presented and considered under POOR, INS. FOR THE, at the several dates at which they were propounded.

It was during the preparation of T. for elucidating the measure then before Parl. that Dr. Price propounded his hypothesis in regard to sickness, viz. that in sos. consisting of persons under 32 years of age, a 48th part of the members will always be in a state of incapacitation from illness or accidents; that from the age of 32 to 42 this proportion increases to one-quarter more than a 48th part; from 43 to 51 to one-half more; and from 52 to 58 to three-quarters more; and from 58 to 64 to double. The first branch of this proposition, referring to ages under 32, is believed to have been founded in some degree upon experience; the others proceed upon the assumption that after that age, as life approaches to its close, sickness becomes more frequent, in the ratio as life becomes less valuable. It has been contended that some allowance ought to have been made in respect of *accidents*, the liability to which does *not* increase as life advances; but the correction was not a material one.

Upon the supposition of this hypothesis Dr. Price required from every subscriber under 32, who should desire to have an allowance in sickness of 4s., a weekly payment of 1d.—being the 48th part of 4s.; the same payment increased by a quarter, that is 1½d., from subs. between the ages of 32 and 42; and so on to 2d. for members whose ages exceeded 58 years.

He constructed T. showing the contributions and allowances at different periods of age, of which the following are but examples—the orig. T. were very elaborate.

TABLE I.—Showing the Rates of Weekly Contributions and corresponding Weekly Allowances during Sickness or Accident.

Class.	Ages of Contributors on Admission.					Weekly Allowance.	
	Under 32.	From 32 to 42.	From 43 to 51.	From 52 to 58.	From 59 to 64.	Bedlying Pay.	Walking Pay.
	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>d.</i>	<i>s. d.</i>	<i>£ s. d.</i>	<i>s. d.</i>
1	1	1½	1½	1½	2	4 0	2 0
2	1½	1½	2½	2½	3	6 0	3 0
3	2	2½	3	3½	4	8 0	4 0
4	2½	3	3½	4½	5	10 0	5 0
5	3	3½	4½	5½	6	12 0	6 0
6	3½	4½	5½	6½	7	14 0	7 0
7	4	5	6	7	8	16 0	8 0
8	4½	5½	6½	7½	9	18 0	9 0
9	5	6½	7½	8½	10	1 0 0	10 0
10	5½	6½	8½	9½	11	1 2 0	11 0
11	6	7½	9	10½	1 0	1 4 0	12 0

In view of a national scheme, it became necessary to provide a higher scale of weekly allowances than was usual with F. Sos. at that date. The ages of admission to membership are here grouped in 5 periods. *The contribution in all cases ceased at age 64.*

TABLE II. showed the weekly contributions required at all ages of membership up to 64, in order to obtain the superannuation allowance of 2s. in class I. (running up to 12s. in class XI.) on attaining 65, or of 4s. in class I. (running up to £1 4s. in class XI.), viz. under 21, 1d. p. week in class I. to 6d. in class XI.; at ages 27 and 28, 2d. up to 1s.; at age 34, 3d. up to 1s. 6d., and so on.

The feature of these T. is that the contribution for superannuation is quite distinct from that for sickness. In a State scheme we assume the compulsory contribution would extend to both T.

—This constitutes a landmark in the hist. of F. Sos.—because henceforward they had some guide as to contributions progressing with age.

The T. were pub. in the 5th ed. of *Reversionary Payments*, 1792; and the latest ed. They have been sometimes designated the *Northampton Sickness T.*

1791.—In Sir John Sinclair's *Statistical Account of Scotland*, commenced to be pub. this year, is contained much information relative to F. Sos. They were increasing in numbers very rapidly; and were of great service in preventing the industrial and labouring classes from becoming chargeable on the poor-rate. Some of the Scotch Societies differed in their mode of working from the English Sos. There was one at Galston, in the county of Ayr, which was spoken of as a novelty (although many asso. had been formed in England on the same plan—known as "Contribution Sos."); and commended as being on a very simple principle. It was called the Penny, or Halfpenny So. It consisted of about 50 members. "It had no funds which could be embezzled"; but when a brother was confined to bed by sickness, every member paid him a penny weekly. If able to go about, but not to work, a halfpenny.—See vol. ii. p. 82.

1792.—There was this year enacted 32 Geo. III. c. 29—*An Act for Estab. a Permanent Fund for the Relief and Support of Skippers and Keelmen employed in the Coal Trade of the River Wear, in the County of Durham, who by Sickness, or other accidental Misfortunes, as by Old Age, shall not be able to maintain themselves and their Families: and also for the Relief of the Widows and Children of such Skippers and Keelmen*—which recites:

Whereas the skippers and keelmen employed in navigating keels in the coal trade upon the River Wear are very numerous, and, from the nature of their employment, are obliged to reside mostly in the same parish or township; so that when they or their families become objects of parochial relief, either the parish or township in which they are settled is grievously burthened, or sufficient provision is not made for their support; and whereas great benefit will result to the said skipper and keelmen, and their families, and a reduction of the poor-rates in the parishes or townships where they are settled will be effected, by forming such skippers and keelmen into a so., and estab. a permanent fund, by the allowance of a small sum out of their respective wages, which they are willing to make, to be applied for the relief and support of themselves and families, in case of sickness, old age, or infirmity, and of their widows and children.

It then enacts that the skippers and keelmen navigating keels in the coal trade upon the River Wear should be formed into a So.; and proceeds to provide rules and regulations for its government and management. The guardians of the So. might provide an hospital for the maintenance of the members during disability or old age; or might make allowances to them, their widows, and their children under 12 years of age. "Provided also that no skipper or keelman, nor any widow or children of any skipper or keelman, shall receive or enjoy any benefit or provision under this Act, unless such skipper or keelman shall have contributed his quota towards the fund hereby

directed to be raised, for the space of one entire year, without wilful or intentional interruption" (sec. 6). All the persons engaged in these pursuits on the Wear were bound to contribute to the fund to be raised for the purposes named, a sum not exceeding one halfpenny for each chaldron of coal carried in their keels. This to be retained by the "fitters" from the wages of the men. Persons leaving these occupations might still contribute, and receive benefits, if the guardians of the So. approved.

There was pub. this year in the *Bath Papers* [vol. ii. art. 16] one: *On the Utility of those Clubs called by the Name of F. Sos. in Country Parishes*, by J. B.

There was pub. this year anon. a pamph.: *An Appeal to the Public on the General Utility of Benefit Sos.* (Vernor, 8vo. 1s.)

1793.—There was enacted the first of a long series of legislative measures regarding F. Sos. in Gt. Brit., viz. 33 Geo. III. c. 54—*An Act for the Encouragement and Relief of F. Sos.*—and commonly known as Mr. Rose's Act. It recites:

Whereas, the protection and encouragement of F. Sos. in this Kingdom, for raising by voluntary subs. of the members thereof, separate funds for the mutual relief and maintenance of the said members in sickness, old age and infirmity, is likely to be attended with very beneficial effects, by promoting the happiness of individuals, and at the same time diminishing the public burdens.

It then enacts that any number of persons in Gt. Brit. might form themselves into sos. "of good fellowship, for the purpose of raising from time to time by subs. of the several members of every such so. or by voluntary contributions, a stock or fund for the mutual relief and maintenance of all and every the members thereof, in old age, sickness and infirmity, and for the relief of widows and children of deceased members;" and might make rules, orders, and regulations, for their good government, and amend and alter the same; and might impose reasonable fines and forfeitures upon the members, subject to the requirements of this Act (sec. 1).

The rules, and all alterations thereof, were to be exhibited to the Justices in Quarter Sessions, who might annul or confirm them. Rules were to be signed by and deposited with clerks of peace of counties, or divisions of counties. No so. estab. after the passing of this Act to be regarded as falling within its authority until rules so confirmed (sec. 2). No confirmed rule to be altered but by authority of gen. meeting; and all alterations to be subject to the review of the Justices in Quarter Sessions (3). Sos. might appoint officers, and treasurers were to give bond to Clerk of the Peace; bonds not chargeable with stamp duty (4). Treasurers and trustees to invest surplus contributions and bring proceeds into account for use of so. (6 and 7). On their failing to account, application to be made to Court of Chancery; but no fee to be payable by a so. regis. under this Act (8 and 9). Preferential claims for moneys due from estates of such persons (10). Sos. to state their objects before having rules confirmed; and no so. to be dissolved without consent of Justices (12). Under sec. 15 the sos. might receive donations towards stocks or funds. And sec. 16 gave power to refer disputes to arbitration. The remainder of the clauses of the Act had reference mainly to settlement and removal under the Poor Law Acts.

At a general meeting of the Delegates of the United Benefit Sos. held at the Globe Tavern, Hatton Garden, on Friday, 28th June this year, it was resolved unanimously:

That the thanks of this So. be presented to George Rose, Esq., expressive of their gratitude for his having introduced into Parl. a Bill for the encouragement and relief of F. Sos., which, under the sanction of the legislature, gives security to their property, permanency to their establishments, and protection to every individual member.

It is instructive to note the position from a legal point of view of F. Sos. in Gt. Brit. up to this date. A So. itself could neither sue nor be sued: it had therefore the greatest risks and difficulties to contend against in the investment of its funds, or in recovering moneys due to it. The law afforded it no means of preventing fraud or robbery on the part of the officers entrusted with the management of its affairs, and the custody of its funds. No prosecution could be instituted except in the names of all the members; and a perfectly correct list, containing all, and omitting none, could seldom be made out in a fluctuating body—some dying, some resigning; some forfeiting, or being excluded; and every such change annulled all the proceedings, and made it necessary to recommence. No member of the so. who felt himself aggrieved by the decision of his brother members could obtain relief with any degree of promptness. Indeed, the law regarded all such asso. not as illegal, but as partnerships; and the only remedy lay in the Court of Chancery, where all the members had to be made parties. A remedy nearly always very much worse than the disease!

Sir F. M. Eden, speaking of the management of F. Sos. before the enactment of this measure, says:

Before the passing of this Act, it frequently happened that the majority of a club (which by the rules was often competent to make laws) expelled all the absent members on slight pretences, in order to favour the views of some interested ale-house keeper. Persons thus injured were left without the means of redress. The inability to sue and be sued (which numerous bodies of men having one common interest often feel, but which I believe was not much felt by F. Sos.) is also effectually removed; and the clubs can now, if it should be necessary, easily enforce payment from the officers to whom they have entrusted their funds. Another great and essential advantage conferred on such of these institutions as had their rules confirmed by Justices, was the privilege of carrying on their occupations and trades in the most convenient place, without being subject to be removed to their legal settlements.

This question of the legal "settlement" in regard to becoming a charge upon parishes for poor law relief, was at this period regarded as a very serious matter. Sums were expended in legal contests regarding it which would have purchased life annu. for the parties who for the moment had become paupers.

1794.—There was pub. : *Observations on the Act for the Relief and Encouragement of F. Sos.*, by a Gentleman who framed the Bill.

1795.—There was enacted 35 Geo. III. c. 3—*An Act for more effectually carrying into execution an Act made, etc.* [the Act of 1793]; and for extending so much of the powers thereof as relates to the framing Rules and Regulations for the better Management of the Funds of such Sos., and the appointment of Treasurers to other Inst. of a Charitable Nature—which enacted that Sos. established before the passing of the Act of 1793 might exhibit their rules for confirmation at any Q. Sessions before or immediately after Michaelmas, 1796. The remaining powers of the Act extend to asso. not quite of the F. So. class. [WIDOWS FUNDS.]

During this year (1795) Sir F. M. Eden, Bart., in view of the preparation of his great work, which we shall speak of under date 1797, instituted inquiries throughout the towns and parishes of E. & W. regarding (*inter alia*) the existence or otherwise of F. Sos. He obtained a large amount of valuable information, which we propose to condense for our present purpose. It was a species of national survey made at a very important juncture. The returns being purely voluntary are necessarily incomplete. But they may prob. be taken as a fair average test of the whole kingdom at the period. We have had to make a selection, and have endeavoured to make this fairly representative: except that "special features" have been brought into prominent notice. We have followed the arrangement of *Counties*.

Buckinghamshire.—There were at this date in *Windsor* 3 F. Sos., with certified rules, the number of members in each being limited to 81.

Cheshire.—In the City of *Chester* about this date several F. Sos. had broken up in consequence of losing their funds by bad investments: "partly by a failure of a bank, and partly by an unsuccessful canal near this town, in which thousands of pounds have been sunk. These accidents also disheartened others."

Cumberland.—In *Carlisle* at this date there were 6 F. Sos.—founded respectively, 1772, having now 240 male members; 1778, now 140 males, "stampers"; 1781, 170 male members; same year, 150 male members; same year, 135 female members; 1782, 145 men.

At *Workington* at this date there were several F. Sos. which had been founded some time, by the coal-miners of the district, and which appeared to be flourishing. The owners of the mines took an interest in them, and contributed to their funds.

Derbyshire.—Of 10 F. Sos. at *Chesterfield*, each consisting of about 80 members, only 1 had its rules confirmed by the magistrates.

At *Wirksworth* there were 8 F. Sos., each consisting of about 85 members.

Durham, County of.—In the Chapelry of *St. Margaret* there was a F. So. into which no person was admitted who was disaffected to the Estab. Church or State: the members met every 6th week, spent 3d. in beer, and paid 1s. each into the box. When a member fell sick, he was entitled to 6s. p. week for 20 weeks, if his illness continued so long. After that time the allowance at the option of the So. £8 funeral allowance to members; and £2 for members' wives.

In *South Shields* there were 4 F. Sos., which "allowed from £10 to £15 a year for life to the nearest relative of a deceased member." There were likewise "6 called life clubs, which pay a single benefaction of about £7 to the nearest relative of a deceased member." These appear to have been really "burial clubs."

In *Sunderland* there were 24 F. Sos., the average number of members in each was supposed to be from 50 to 60; most of them had their rules confirmed by the magistrates. "Of these 4 or 5 were women's clubs."

Essex.—At *Colchester* there were 18 F. Sos., "each of from 20 to 40 members. They pay 1s. monthly into the box. Sick persons receive from 8s. to 10s. a week; and aged members 6s. a week. I believe all the Sos. have complied with the late Act of Parl."

Gloucestershire.—In the parish of *Stapleton* there were 2 F. Sos.—one estab. in 1775, which contained (*inter alia*) the following rules: "No person can be admitted a member, that works at the White Lead House, mining, or any work under ground. A member that is impressed into the King's service is allowed the money he has contributed (in case he has not received it on any other account); but if he voluntarily enlists himself, he is excluded." It had now about 50 members.

The other was founded in 1792, and consisted now of 101 members. Of its 46 rules or art., 15 or 16 related to eating and drinking. It also declined to admit members working at the White Lead House. "15. Sin, vice, and immorality abound in this age, even to the profanation of the Sabbath: it is agreed that if any member of this So. shall on the Sabbath-day play at peck and top, marbles, shake in hat, coits, or any

other game, he shall forfeit 2s. 6d. or be excluded; and if any brother member sees him so doing and gives information thereof to the So., he shall receive 1s., and the other 18d. go to the box." "38. That no woman whatsoever shall be suffered to enter the So. room on a feast-day during the time the So. drink holds; whosoever introduces any woman into the room shall forfeit 1s.; neither shall there be any victuals given away on the first day of the feast; whosoever carries or conveys any victuals out of the club-room on feast days, or hides or pockets any with a design to carry it away, shall forfeit 2s. 6d. or be excluded." The remains of the feast were to be given to the wives and children of members by way of breakfast the next morning.

Hampshire.—In *Portsea* there were 6 F. Sos., the number of members varying from 80 to 180. "Only 2 have taken the benefit of the late Act: the expense attending an application to the Justices is the common reason given why the other sos. have not had their rules confirmed."

In *Southampton* there was 1 F. So.

Herefordshire.—In the city of *Hereford* there were 6 F. Sos., 5 of which had from 50 to 80 members in each. They had all had their rules confirmed at Quarter Sessions. "One of them is chiefly for the benefit of widows, and has 250 members. In this club 26s. are paid every year into the box; a member of 3 years' standing when sick receives 6s. a week; and on the decease of a member who has been 5 years in the club, his widow receives £20 a year for life; £15 a year if he has been a member 4 years; and £10 a year if he has not been more than 3 years a member, etc. The rules of this So. are not printed."

Lancashire.—In the township of *Bury* there were 9 F. Sos. for men and 1 for women. "They have all complied with the late Act. The number of members in the clubs varies from 50 to 200. The average number is about 100 in each." The so. for women had only just been started.

In the town of *Lancaster* there were 18 F. Sos. The oldest, the *Benevolent So.*, dated back to 1767—the latest 1794. Five of them were for females—4 being started in 1792. They all had their rules confirmed. The regulations for the management of the sos. were clear and explicit. *Printed forms were in use.*

In *Liverpool* there were 12 F. Sos., the members in each averaging from 80 to 100.

In *Preston* there were 10 F. Sos., the oldest dating back to 1762. There was only one had over 100 members, the oldest, which had 154. The others seemed to range from 50 to 60.

Leicestershire.—In the town of *Leicester* there were 14 F. Sos., nearly all confirmed by magistrates. "These inst. are much liked here, and are increasing in number very rapidly."

Middlesex.—In *Ealing* and *Old Brentford* there were 9 F. Sos.

Monmouthshire.—In the town of *Monmouth* there were 5 F. Sos., each having about 80 members, and all having their rules confirmed. "One of these sos. is somewhat singular: the members each pay a guinea a year into the box, from which a provision is made for their widows. A copy of the rules could not be obtained."

Norfolk.—In the city of *Norwich* there were about 40 F. Sos., "most of which have taken the benefit of the late Act. The number of members in each is from about 18 to 30 and 40. They are not much encouraged by honorary members." See POOR.

In *Yarmouth* it was thought about 20 F. Sos. existed before the late Act. "They were chiefly composed of the poorest classes. Unfortunately they conceived that their several funds were intended to be at the disposal of the magistrates; they therefore mostly agreed to break up and divide their stock. Of these clubs only three are now remaining; and they have not taken the benefit of the Act. The number of members in each club is about 30 or 40."

Northamptonshire.—In the town of *Northampton* there were 29 inns, 42 ale-houses, and 7 F. Sos.—all of which latter had their rules confirmed by the magistrates.

Northumberland.—In *Newcastle-upon-Tyne* there were 26 F. Sos.; the average number of members in each supposed to be about 100—13 had their rules confirmed by magistrates. The *So. of Flaxdressers*, founded 1772, had some peculiar rules: "1. No Flaxdresser shall be admitted into this So. that is above the age of 34 years. . . . No person of any other trade or calling shall be admitted above the age of 28 years. . . . and no more than 30 of any other trade or calling to be in the So. at any one time. . . . Every person entering this so. shall bear a fair character, and at that time shall be free from all infirmities and deformity of body. No apprentice to enter this So. on any account, nor any person that cannot earn 7s. a week by his proper employment; and if any belonging to this So. enter any other, he shall be excluded this." . . . "8. Whenever the So.'s cash does not amount to £30, then the weekly money allowed to sick members shall not be taken out of the box, but each member that is sick shall receive from the rest of the members 1d. p. week; and if the sick member dies, or the wife or widow of a

member, every member shall pay 1s. to defray his (or her) funeral expenses; and if the shillings do not amount to the sum allowed by the article for burying a member, wife, or widow, what is wanting must be taken out of the So.'s cash; but if above, the overplus shall be put to it. . . . 13. The So. not to be dissolved as long as 3 members are willing to support it.

In *North Shields* there were 4 F. Sos. containing about 100 members each.

Nottinghamshire.—In *Newark* there were 49 ale-houses and 10 F. Sos., consisting altogether of about 800 members. The rules were said to resemble each other. Here are several of the points in one of them. "1. The title of this Club shall be 'The Friendly So.,' the members whereof shall be under the government and inspection of a Father and 2 Stewards: and it is hereby declared to be instituted solely for the purpose of dispensing pecuniary relief. . . . 12. This So. shall consist of no more than 81 members." Then the following:

30. Whereas 8 of the Sos. in the town of Newark have, at their joint expense, purchased a corn wind-mill, for the mutual benefit of themselves and families, and appointed Mr. Geo. Stevenson as their agent to the same; and whereas it may be useful to the members of the said Sos. to have flour on credit from the agent; it is therefore agreed, that any debt which may be contracted for flour by any member of this So. with the said Geo. Stevenson, or any future servant or agent to the said Sos., shall be deducted from such monies as he or they may be entitled to receive from the Sos. as their share of money to be divided; and if such member shall happen to die before such debt shall be discharged, the remainder of the debt shall be deducted from the allowances paid by the Club at the death of such member.

This is the earliest instance of the co-operative principle in regard to articles of consumption which we have met with in any F. So., and appears to be contradictory of the declaration made in the first rule of the So. Its rules were confirmed at Quarter Sessions in Nov. 1794.

In *Nottingham* there were 51 F. Sos.—the number of members being "limited to 41 or 51 in each club." There was also a Charitable So. for relieving strangers in distress.

Oxfordshire.—In *Banbury* there were 4 F. Sos., consisting of about 100 members each; rules confirmed.

In *Oxford* there were 7 F. Sos. consisting of 101 members each. Rules confirmed.

At *Nuneham* there existed among such of Lord Harcourt's labourers as he approved of a So. wherein each member paid 1d. p. week; to which his Lordship added a like sum. This formed a fund to which the members had recourse upon any exigency. If they misconducted, or attempted to draw out their subs. upon pretences which, in the eye of their employer, were deemed frivolous, they could only take their own part, without touching the contributions of their patron. In case of death, the funeral expenses of the members were defrayed, and the remainder (which included both the labourer's and Lord Harcourt's subs.) goes to the deceased's family. It was not uncommon for hard-working men to possess £5 or £6 in this fund.

Rutland.—In *Empingham* there was a F. So. consisting of 90 members. It was estab. in 1791, "and the great benefits which result from it both to the morals and the comforts of its members, afford the clearest conviction of the utility of similar inst." In add. to its ordin. rules, the following special ones were added in June, 1794:

That every person hereafter to be admitted into this So. shall declare that he will pay allegiance to the King, and duty to the laws of his country.

That no person whose sentiments shall be found and proved to be unfriendly to the present constitution of this country shall be admitted a member of this So., whose duty and boast it is to fear God, and to honour the King: but that every such person shall be excluded the So., and deprived of all further benefit from it, from the time of exclusion.

This was a rural disclaimer of sympathy with the French Revolution, and its principles. On the passing of these there was collected from among the members, who were generally poor, £1 13s. 1½d. for the service of the Duke of York's army on the Continent.

Shropshire.—In *Shrewsbury* there were 14 F. Sos. for men, and 8 for women. The number of members averaged from 70 to 150. They had all except 1 had their rules confirmed.

Staffordshire.—In *Wolverhampton* there were 34 F. Sos., of which the rules of 1 only had been submitted for approval—the following being the explanation:

They [the members] were apprehensive that the provisions of the Act were intended as a prelude to taxation: and that the magistrates would be authorized to control the disposal of their funds. They likewise thought that applications to the Q. Sessions would be expensive; and being prepossessed with these various ideas, it is not astonishing that they were not much inclined to apply to the magistrates. A few Sos., however, presented their rules to the Justices for their sanction; but upon their being informed that they could not be confirmed unless they were made agreeable to the Act of Parl., these slight difficulties deterred them from proceeding further. They say: "We cannot see that any advantage would accrue from having our rules confirmed: the expense would be so much money thrown away: we will adhere to our old rules, which by long experience we have found to be very beneficial."

It was ascertained that 10 of the male clubs contained 637 members; and 6 of the female clubs, 351 members. The scheme of a Tradesmen's So., meeting once a fortnight, was as follows: Every person must pay for his entrance fee 1s., until the money in the box amounted to £10; then 1s. 6d. until it amounted to £20; 2s. 6d. until it reached

£30; and so on 1s. for each £10 until it reached £100. The benefits were regulated by the amount of funds "in the box." Several other Sos. were said to be on the same plan.

Surrey.—In *Epsom* there were 3 F. Sos. The first, estab. 1765, consisted of 127 members; had £1250 in Gov. securities, and £100 on mortgage. The second, estab. 1778, had 118 members, and £500 invested in the 3 p. cents. The third was of recent formation. "All the three are remarkably regular, and decorous as Sos. There is no evidence that any member of any of them, or any of their families, have ever, during the whole period since their institution, either asked or obtained parochial aid. The first of these Sos. counts among its members several shopkeepers and respectable tradesmen; the two others are principally composed of journeymen and labourers." In the first So. every member was bound to attend the funeral of his fellow-members, or pay 1s. penalty.

In *Esher* there was a F. So. consisting of 61 members. "This So., Phoenix-like, rose from the ashes of a club, of 150 members, which was dissolved about 13 years ago in consequence of having lost £300 by the failure of some tradesmen, to whom they had entrusted part of their stock. Upon this loss the members agreed to divide the remainder of their stock, and to break up the club. However, 6 of the old members immediately formed the present club; its stock now consists of near £300. The general notion entertained here of the Act for the encouragement of F. Sos. was, that the Gov. intended laying a tax on them."

In *Farnham* there were 3 F. Sos. numbering in all about 270 members. "These Sos. are much encouraged by honorary members. Their orders have been confirmed by the magistrates."

Warwickshire.—In *Birmingham* "there are are innumerable F. Sos. and Clubs (in the nature of raffles) for the encouragement of particular trades."

In *Coventry* there were 33 F. Sos. containing upon an average about 36 members each. "It is thought that all have had their orders confirmed by the Justices."

In *Southam* there was 1 F. So. with 93 members: ann. feast on Whit-Monday; half a guinea paid to clergyman for preaching. All proposed alterations of rules to be first laid before and approved by 13 members. "No honorary members admitted."

In *Sutton-Colefield* there were 5 F. Sos., which numbered from 40 to 120 members each. "Their rules in general are to subs. 1s. a month; to receive 6s. a week in time of sickness, etc.; and 5s. a week for life, when rendered incapable of working through age or infirmity." Rules not confirmed.

Westmorland.—In *Kendal* there were 20 so-called F. Sos., of which 2 were for women. The oldest So. dated back to 1771. Of the preceding, 7 were called "trade clubs," because "they admit none into their Sos. but persons of the same trade. The number of the two clubs of shearmen-dyers does not exceed 20 persons." Here we have the spirit of the Gilds in regard to the admission of trade members only.

In *Kirby Lonsdale* there were 2 F. Sos. having between them about 350 members. One had £500, and the other £200 stock invested. The *Union* F. So. had a graduated scale of contributions, depending upon age. "No person shall be admitted into this So. who shall belong to any other Benefit So.; nor shall any man be continued a member who shall attempt to subvert our happy constitution in Church and State."

Wiltshire.—In *Bradford* there were 9 or 10 F. Sos., some of which had their rules confirmed: "These useful inst. are much encouraged by honorary members; and it is perhaps partly owing to the thriving state of these Sos. that the reduction in the poor-rates has been effected."

In *Trowbridge* there were 5 male and 3 female F. Sos., on an average about 80 members each. "None of them have taken the benefit of the late Act. They have no honorary members."

Yorkshire.—In *Bradford* there were 13 F. Sos., which on an average had 120 or 130 members. "Several of them were lately estab.; members are admitted from all the neighbouring townships."

In *Ecclesfield* there were 4 F. Sos., one estab. many years, having 200 members; the others were modern and had few members.

In *Great Driffield* 1 F. So. with 110 members. "Funds in a flourishing state."

In *Halifax* there were 10 F. Sos.; they contained about 1000 members, half of which resided in the neighbouring townships. "Four are male clubs, and only admit members of their own line of employment."

In *Kingston-upon-Hull* there were 51 F. Sos., of which 24 had their rules confirmed, and 27 had not. The earliest So. dated from 1771—but as this was called the "Second So.," it may be supposed there had been an earlier one, which had passed away. The largest number of members in any one So. appeared to be 212. Some of the names of the Sos. were curious; as "Good Agreement," "Loving Brotherly," "Generous Friend," "Queen Charlotte," "Church and King and King and Constitution," "Well-disposed Brotherly." (See 1841.)

In *Sheffield* the number of F. Sos. in 1786 was 52; they paid in that year to sick members £3670. In 1787, 55; these disbursed to sick members £3519. "Almost

every manufacturer [*i.e.* artizan] is a member of a F. So." Since the last-named date they had not printed tables of their disbursements. "They are very cautious of giving information relative to the state of their funds; and I believe none of these Sos. have had their rules confirmed by the magistrates, from an apprehension that, in bringing forward the late Act, Gov. was actuated by very different views from what the Act professes."

In *Skipton*, then a purely agricultural district, there were 3 F. Sos.

North Wales.—From *Llanferran* (Denbighshire) it was reported that F. Sos. were not now so numerous as they had been 20 years previously; "3 or 4 have been dissolved in this neighbourhood owing to their having been defrauded of great part of their funds by designing wretches to whom they had entrusted their stock. Others that have continued to this day, have fallen into disrepute, by too greedily entering into political discussions, instead of attending to the plain objects of their institution."

In *Wrexham* there were 6 F. Sos. having in all about 700 members. Rules confirmed.

South Wales.—At *Narberth* (Pembrokeshire) there was a F. So. "estab. about 20 years ago: it is in a very flourishing state: maintaining its own poor; and has a surgeon and apothecary by the year to attend the sick and hurt." Rules confirmed.

In *Knighton* (Radnorshire) 2 F. Sos. Rules confirmed. In *Presteign* (same county) 1; rules confirmed.

Female F. Sos.—In the preceding notes mention is several times made of Female Benefit Sos. These were chiefly composed of married women: and the principal object in view was to insure a decent subsistence during the lying-in month—a period during which, of all others, a labourer's wife is in most need of extrinsic assistance. Sir F. M. Eden found that the advantages which would have been otherwise secured were much lessened by the disadvantages under which married women then laboured—the husband being legally entitled to claim all the pecuniary allowance to which his wife became entitled by reason of her membership. The law in this regard being altered, since 1870, it appears to us that women engaged in industrial pursuits might find F. Sos. of great service to them in regard to sickness and disability generally.

Here is an abstract of the rules of a Female So. estab. at *Wigton*, Cumberland, before the close of the century:

Healthy women under 43 years of age admitted on paying 1s. 9d. entrance money, 7d. box money, and 1d. towards providing a doctor. A member of 3 years' standing allowed in case of sickness 5s. a week for the first 10 weeks, and 3s. a week afterwards: but no sickness or lameness in the time of pregnancy entitles a member to relief from the So.; but if they are the consequence of pregnancy, such member is entitled to an allowance, to commence 1 month after her lying-in. £5 allowed towards the funeral expenses of a member, and £2 towards the funeral expenses of a husband; but a member cannot receive this last allowance more than once in her life. Widows allowed £2 on death of a child; and unmarried members £2 on death of father, brother, etc. *Members disclosing the secrets of the So., upbraiding one another, refusing to be silent, after due notice, etc., liable to a fine* [the framers of the rules, which are very minute, appeared to have entertained strong ideas of the loquacity of the sex!]. Any single or unmarried woman, having had a child before she entered the So., who shall commit the same crime when in the So., shall be excluded; or if any married woman shall have a child in the absence of her husband, she also shall be excluded, provided she cannot satisfy the So. in 6 months. Members of 20 years' standing allowed 2s. a week for life, while the fund consists of £100 and upwards. For managing the concerns and keeping the keys of the strong box of the So., two stewardesses are taken by rotation, and continue 6 months in office; two collectors, chosen by the stewardesses, collect fines, etc. A beadle and warden (both females) likewise taken by rotation—the former being the message-bearer, and the latter inspecting the public affairs of the So., to see that the officers discharge their duty, and attend the door, on club nights. A committee of 6 women taken by rotation from the roll every six months, whose bus. it is to determine all controversies, to accept members, with the concurrence of the stewardesses, and to give their assent to the lending and disposing of money, or other things belonging to the So. The club meets once a month at an ale-house in *Wigton*, the landlady of which was bound under a penalty of 2s. 6d. to find them good ale!

The Sisterly Society, founded at *Workington* in the same county, in 1793, under the patronage of Mrs. Curwen, was governed by a lady patroness, whose office was perpetual. (See 1798.)

1796.—There was enacted by the Irish Parl. 36 Geo. III. c. 58—*An Act for the Encouragement and Relief of F. Sos.*—which in fact embodied the principal clauses of the two preceding Acts of the Brit. Parl. There were no new features introduced.

Same year Mr. Peter Colquhoun, LL.D., pub. a *Treatise on the Police of the Metropolis*, etc., wherein he makes an estimate of the relief annually afforded by the Charitable and Provident Inst. therein. He considered there were in London 600 F. Sos., having a total of 70,000 members and giving an average of 116 members to each So.: and that the aggregate relief afforded to their members reached £36,000 p.a.

Sir F. M. Eden, reviewing these figures in the following year, said that in those clubs which had come to his knowledge the number of members was from 60 to 100—the average being about 80. The total members would therefore prob. be about 48,000. The estimate of the amount disbursed to the members he thought too low. "In those I have inquired into, the ann. payments on an average exceeded £1 each member."

In the same year, Mr. Edward Jones pub. a pamph. : *The Prevention of Poverty by Beneficial Clubs, etc.*, etc.

1797.—Sir Fredk. Morton Eden, Bart., published his well-known work : *The State of the Poor, etc.*, wherein he treats of F. Sos. as an essential part of his subject, and in a more comprehensive manner than any preceding writer. In his opening chapter upon these he says :

If the merit of political inst. is to be appreciated from ancient precedent and long practice, there are perhaps few social contrivances which have a better claim, on this account, to approbation and support, than those simple estab. called Benefit Clubs, or F. Sos., whose object is to exemplify one of the wisest political maxims : "That by an association of the many, the few may be assisted ;" and to promote the most laudable of charities—that of securing to the industrious, from the surplus, or a part of the surplus, of their earnings an equivalent resource during their incapacity to labour. These useful asso., if their vanity could be flattered (as is too commonly the case with nations themselves) by marks of antiquity, might easily trace their origin to the earliest periods of English hist. : for that those writers are mistaken, who suppose that the introduction of guilds, or fraternities (which, possessing a stronger tincture of religion, were in many other respects similar to modern clubs) was subsequent to the Conquest, is evident from several curious Saxon Deeds (now preserved in the Museum) which Dr. Hicks has transcribed in his learned work on Northern Literature.

This branch of the subject will be followed up in more detail under GILDS.

We have already presented an outline of the detailed results of the author's inquiry (see 1795) : we therefore propose here to confine ourselves to his personal views on the subject of F. Sos.

In the preface to his work he says :

No institutions have ever made a more considerable progress in a short space of time than has been made within a few years by the *Benefit Clubs* or *F. Sos.* I regret that it is not in my power, to state either the number of such Sos. or the numbers of their respective members. This is an inquiry far beyond the powers of a single individual. *As there, however, is not a district in the kingdom, in which many such Sos. are not found, the whole amount of their numbers must be very considerable.* These Sos. do not owe their origin to Parl. interference ; nor to private benevolence ; nor even to the recommendations of men of acknowledged abilities, or professed politicians. The scheme originated among the persons on whom chiefly it was intended to operate : they foresaw how possible, and even prob., it was that they, in their turn, should, ere long, be overtaken by the general calamity of the times, and wisely made provision for it. A stronger proof could not well be given, to show that the great mass of the people, prompted only by what they themselves saw and felt, were convinced of the inefficacy of all legislative regulations, and therefore resolved, in at least one instance, to legislate for themselves. Rejecting, as it were, a provision gratuitously held out to them by the public, and which was to cost them nothing (the Poor Law), they chose to be indebted for relief, if they should want it, to their own industry and their own frugality. And I would fain hope that I do not deserve to be set down as wanting in all due respect for Parliamentary wisdom, if, in a case like this, I should declare my preference of the wisdom of the people : *I cannot recollect any act of the legis., for many years, that has either produced such important national advantages, or been so popular, as the institution and extension of F. Sos.*

Under the guidance of this principle I go on further to observe, that F. Sos. have now estab., on the broad basis of experience, one great and fundamental truth, of infinite national importance, viz. that, with very few exceptions, the people in general, of all characters, and under all circumstances, with good management, are perfectly competent to their own maintenance. The clubs are formed, as is well known, in general, of persons in all the inferior stations of life ; persons who, in this respect, are by no means distinguished from their neighbours by superior wisdom or better morals ; and who, being neither more industrious nor more frugal than others, it may be supposed neither earn more nor lay by more of their earnings. And yet I do not find that any parish has been burthened with the maintenance of the member of any Friendly So. ; nor are the instances numerous of the families of members being burthensome. This being the case, it is evident that the nation must have saved many thousands of pounds (perhaps millions) by these useful inst. They are beneficial to the nation, not merely by preventing many thousands of their members, who are not less liable to misfortunes, diseases, impotency, and old age than others, from being burthensome ; but also by countenancing and promoting a spirit of independence, and better habits of industry and frugality, than are usually found among the labouring classes of society.

Reviewing the various projects which had been set on foot for compelling the industrial classes to belong to F. Sos., he says :

There are great objections to all compulsory schemes for erecting F. Sos. : whatever benefit is intended the poor, obliging them to subscribe is, in effect, taxing them ; nor can I imagine a severer tax, in the present confined state of financial resource, than a 24th or 30th of a man's daily earnings, imposed as a direct tax. It may be said, perhaps, that this cannot, with propriety, be considered as a tax ; it is only forcing him to do what in many instances he willingly does—to secure himself a comfortable maintenance through life. This is however an argument which in some measure shows that coercion is unnecessary. Why use force when mutual convenience will prob. make that palatable, which legislative direction may render nauseous ? Few of us will be driven, but most of us may be led.

Looking at the matter from its legislative aspect—for there can be no question as to the moving cause of the legislation of the period immediately preceding that at which he wrote—he remarks :

Whether F. Sos. will or will not eventually contribute to reduce the poor-rates, the limited extent of my inquiries does not allow me peremptorily to decide. That, however, these inst. increase the comforts of the labouring classes who belong to them, will be evident from comparing the condition of those who are members of them, and of those who, in the same village, are content to rely on the parish for relief. The former are generally comparatively cleanly, orderly and sober, and consequently happy and good members of society ; whilst the latter are living in filth and wretchedness, and are often from the pressure of a casual sickness, or accident which incapacitates them from

working, tempted to the commission of improper acts (not to say crimes), against which the sure resource of a benefit club would have been the best preservative.

He remarks in another place (vol. i. p. 631):

Any attempt to combine these *voluntary* asso. with parochial *taxes* will, I am persuaded, do much harm; and lessen that sense of independence which a member of a benefit club totally unconnected with a poor-rate now enjoys.

He, being himself an M.P., and a man of very great practical sagacity, was not a believer in the advantages of detailed legis. in any form in regard to F. Sos. On this question his words deserve consideration even at the present day:

I am . . . thoroughly convinced that if Parl. attempts any further regulation of these useful estab., the inclination of the labouring classes to enter into them will be greatly damped, if not entirely repressed. The Acts already passed, although they are known and generally understood to have been framed with the most benevolent notions, and do really confer substantial benefits on these inst., have created much alarm. *Nay, they have certainly annihilated many Sos.* At the same time it is but fair to confess that they *may* have raised others. This, however, is more difficult to ascertain. Any further favours from Parl. would irretrievably lessen the confidence, which is still entertained by the members of most benefit clubs, that the legislature will not interfere in controlling asso. which do not appear, from any evidence which has yet been laid before the public, to be adverse to economy, good morals, or public tranquillity.

He then proceeds to notice the objections which had been urged against F. Sos., as follows:

I have, indeed, more than once heard it insinuated that F. Sos. are apt to degenerate into debating clubs; and that convivial meetings on a Saturday night become the aptest vehicles for disseminating principles subversive of subordination and submission to the laws of our country. I have also heard it asserted that the members of F. Sos., from being accustomed to assemble at ale-houses, are not only stimulated by interested landlords, but encouraged by the contagion of ill examples in habits of drunkenness; that the money which is spent on a club night is entirely lost to the labourer's family; and that there are various ways in which the earnings of industry might be applied more advantageously to the morals of the labourer, and the comfort of his family. F. Sos. it is true, like all other human contrivances, have their defects. It is, however, though a short, a sufficient answer to such objections as I have noticed, and to some others which it is unnecessary to enumerate, that these inst. do not aim at *perfection*, but *improvement*. They are not intended to be that "faultless monster which the world ne'er saw"; but it is sufficient proof of their excellence that they are congenial to the social habitudes and prejudices of the labourer; and that, if they cannot correct the inclination (which is too often caused by hard labour) for conviviality and dissipation, they at least convert a vicious propensity into a useful instrument of economy and industry, and secure to their members (which can seldom be purchased at too dear a rate) subsistence during sickness, and independence in old age.

Secret Societies.—We have heretofore said nothing concerning these. They are believed by some writers to have prevailed extensively in Europe during the Middle Ages; but the only one which appears to have taken permanent root in Gt. Britain is that associated with the *Masonic Orders*—its members being known commonly as *Freemasons*. They have existed in Gt. Brit. since the 13th century. We have not in fact regarded these as coming within the range of F. Sos., as usually understood. They do indeed rank as convivial and benevolent asso. of a high order; but the purely provident element is wanting. We shall have to speak of these secret orders under GILDS. The events of the French Revolution did however lead to the suspicion that pernicious doctrines were being spread into the U.K. by means of secret sos.; and hence was enacted in this year (1797) the 37 Geo. III. c. 123—*An Act for the more effectually preventing the Administering or Taking of Unlawful Oaths* [extended by 52 Geo. III. c. 104 (1812)]: punishment, 7 years' transportation. This was, however, but the beginning of legis. upon the subject. (See 1799.)

There was founded in Lond. this year "The So. for Relieving the Condition and Increasing the Comforts of the Poor." The reports of which contain a vast amount of interesting and valuable information regarding F. Sos.

1798.—There was founded in Edin. the *Female Friendly So.*; but the magistrates of the County of Edin. refused to extend their sanction to the So., as they did to some later F. Sos. for Females. The question afterwards formed the subject of a memorial, regarding the grounds of refusal, which were understood to be some technical question arising under the Act of 1793. (See 1795, *Female F. Sos.*)

This year the Rev. James Cowe pub. several religious and philanthropic tracts, No. 2 being on the State of the Poor, and on the methods of improving it, by means of F. Sos.

1799.—There was enacted 39 Geo. III. c. 79—*An Act for the more effectual Suppression of Sos. estab. for Seditious and Treasonable Purposes; and for better preventing Treasonable and Seditious Practices.* The preamble of which set forth:

Whereas a traitorous conspiracy has long been carried on, in conjunction with the persons from time to time exercising the powers of Gov. in France, to overthrow the laws, constitution and gov., and every existing estab., civil and ecclesiastical, both in Gt. Brit. and Ireland, and to dissolve the connexion between the two Kingdoms, so necessary to the security and prosperity of both: And whereas, in pursuance of such design, and in order to carry the same into effect, divers sos. have been of late years instituted in this Kingdom, and in the Kingdom of Ireland, of a new and dangerous nature, inconsistent with public tranquillity, and with the existence of regular government, particularly certain sos. calling themselves *Sos. of United Englishmen, United Scotsmen, United Britons, United Irishmen, and The London Corresponding So.*: And whereas the members of many such sos. have taken unlawful oaths and engagements of fidelity and secrecy, and used secret signs, and appointed committees, secretaries, and other officers, in a secret manner; and many of such sos. are composed of different divisions, branches, or parts, which communicate with each other by secretaries, delegates, or otherwise, and by means thereof maintain an influence over large bodies of men, and delude many ignorant and unwary persons into the commission of acts highly criminal: And whereas

it is expedient and necessary that all such sos. as aforesaid, and all sos. of the like nature, should be utterly suppressed and prohibited, as unlawful combinations and confederacies, highly dangerous to the peace and tranquillity of these Kingdoms, and to the constitution of the Gov. thereof as by law established.

It was therefore enacted that all the before-named sos., and all other sos. called *Corresponding Sos.* of any other city, town, or place, should be prohibited, "and the same are hereby utterly suppressed and prohibited, as being unlawful combinations and confederacies against the Gov. of our Sovereign Lord the King, and against the peace and security of H.M.'s liege subjects." The Act was not to extend to regular lodges of *Freemasons*, as witness the following clauses :

V. And whereas certain Sos. have been long accustomed to be holden in this Kingdom under the denomination of *Lodges of Freemasons*, the meetings whereof have been in great measure directed to charitable purposes, be it therefore enacted that nothing in this Act shall extend to the meetings of any such So. or Lodge which shall before the passing of this Act have been usually holden under the said denomination and in conformity to the rules prevailing among the said So. of *Freemasons*.

VI. Provided always, That this exemption shall not extend to any such So. unless 2 of the members composing the same shall certify upon oath . . . that such So. or Lodge has before the passing of this Act been usually held under the denomination of a *Lodge of Freemasons*, and in conformity to the rules prevailing among the Sos. or Lodges of the *Freemasons* in this Kingdom ; which certificate, duly attested by the magistrate before whom the same shall be sworn, and subscribed by the person so certifying, shall within the space of 2 calendar months after the passing of this Act be deposited with the Clerk of the Peace for the county, stewardry, riding, division, shire or place, where such So. or Lodge hath been usually held. Provided also that this exemption shall not extend to any such So. or Lodge, unless the name or denomination thereof, and the usual place or places, and the time or times of its meeting, and the names and descriptions of all and every the members thereof, be regis. with such Clerk of the Peace as aforesaid within 2 months after the passing of this Act, and also on or before the 29th day of March in every succeeding year.

It was under this same Act that the almost national rights of free speech and free printing were so seriously curtailed. But we only deal with it now in regard to its bearing upon the *future* rather than the present of F. Sos. (See 1819 and 1846.)

Sir F. M. Eden and the other promoters of the *Globe Insurance Company* applied to Parl. for a Charter. It was stated that one of the objects in founding that Co. was : For assisting and improving F. Sos. For this purpose the memorial stated the office would agree to receive such funds as Benefit Clubs might entrust to it ; to allow int. thereon not exceeding 5 p.c. ; to keep a running account with the treasurers of such clubs, and to faithfully administer such contributions and donations as the masters and employers of servants and labourers should deposit periodically or otherwise, at the office, on account of F. Sos., or for other charitable purposes. To F. Sos. connected with the office the following advantages would arise : Relief on equitable principles to persons of all ages and occupations ; the removal of that restraint on personal liberty which F. Sos. in general impose on their members, by confining the benefits they hold out to persons residing within a certain district. Members of the So. connected with the office would be enabled to transfer their interest from one club to another, to proportion their periodical subs. to their respective wants and abilities, and to contribute specific payments or periodical subscriptions.

This scheme in fact intended to provide facilities for carrying out the provisions of the Acts of 1793 and 1795. But the *Globe* did not obtain the desired Charter, and their scheme subsequently became altered in many of its features—those relating to F. Sos. being omitted.

1800.—Mr. Jeremy Bentham, in the outline of a work on pauper management written about this date, speaks of the "collateral mischiefs" to which the management of F. Sos. is liable to give birth ; and he includes therein : 1. Drunkenness and dissipation. 2. Disagreements and quarrels. 3. Combinations for sinister purposes of a private nature. 4. Ditto of a public nature—"raging malady of the times." But he frankly says [vol. viii., *Collected Works*, by Bowring, p. 410] :

The inadequacy of these inst., compared as well with what *have* been, as with [what] *might have* been their objects, reflects nothing like imputation upon the members, contrivers, promoters, or patrons of these truly useful and meritorious asso. They worked, as they had to work, by the existing lights, with the existing materials, in the existing state of things.

1801.—Sir F. M. Eden pub. *Obs. on F. Sos. for Maintenance of the Industrious Classes during Sickness, Infirmary, Old Age, and other Exigencies*. He enlarges upon some of the points upon which he had spoken in his larger work already reviewed. He adds that from inquiries made in 1795-6 it appeared that of 213 clubs in different districts, 93—or nearly one-half—were not enrolled under the Act of 1793.

The most important new details in this pamph. consisted of the following T., made up from returns obtained from the Deputy Clerks of the Peace and the Town Clerks in various parts of the Kingdom.

Returns of F. Sos. enrolled in the several Counties of E. and W.

Bedfordshire	9	Cheshire	[no return]	Dorsetshire	13
Berkshire	14	Cornwall	69	Durham	66
Bristol	32	Cumberland	73	Essex	205
Buckinghamshire	44	Derbyshire	133	Gloucestershire	111
Cambridgeshire	20	Devonshire	156	Hampshire [no return]	

Herefordshire	32	Oxfordshire	15	North Wales—	
Hertfordshire	33	Rutlandshire.....	14	Anglesey	[none]
Huntingdonshire [no return]		Shropshire	125	Carnarvonshire [no return]	
Kent	158	Somersetshire	123	Denbighshire	16
Canterbury	31	Staffordshire.....	88	Flintshire	9
Lancashire	820	Suffolk	235	Merionethshire.....	1
Leicestershire	84	Surrey	188	Montgomerysh. [no return]	
Lincoln City	3	Sussex	31		
Lincolnshire [no return]		Warwickshire	188	South Wales—	
London	250	Westmorland	15	Brecknockshire	21
Middlesex	about 600	Wiltshire	30	Cardiganshire	8
Monmouthshire	33	Worcestershire 139	156	Carmarthenshire	25
Norfolk	185	Worcester	17	Glamorganshire [no return]	
Norwich	18	Yorkshire—		Pembrokeshire.....	11
Northamptonshire	62	Hull.....	20	Radnorshire	9
Northumberland	13	North Riding	48		
Nottinghamshire 103	141	East	16		
Nottingham	38	West	330		

The total of the preceding figures is 5117. But in view of a complete return, the compiler desired to add 283 for places omitted; and then add one-third of total for clubs not enrolled: and this made the aggregate of F. Sos. in E. and Wales to be 7200.

He adds: "Finding that 400 clubs contain 38,800 members, or 97 each on an average, I conceive that 90 may be considered as a moderate average for the whole kingdom; which will give 648,000 as the number of members in 7200 Sos. And if the average of each member's family be 4 persons, 2,592,000 individuals, or nearly a fourth of the pop. of E. and W., may be supposed to receive occasional relief from these useful estab." Some deduction from this he thought (in a footnote) might be made, on account of more than one member of the same family sometimes belonging to a club.

He next proceeds to estimate the average aggregate amount of payments made by each So. to its members ann.; and from examples he quotes of F. Sos. in the North of Eng. and in Lond., he finds this average p. club to be £62 p.a.—"7200 clubs will therefore expend in this manner about £446,400 a year. This estimate it may be presumed is moderate: for if each member be supposed to contribute ann. 13s. to the box of the club (and in the S. of Eng. the monthly subs. varies from 1s. to 2s. 6d.), the yearly receipts from 648,000 members will amount to £421,200, exclusive of admission fees, liquor money, and fines; which will altogether make a total of more than £500,000—an immense sum to be raised by voluntary contribution from those classes who subsist by manual labour." He was not able to make any estimate for Scotland. He adds:

It is much to be lamented that no national inst. exists from which the industrious classes might, on just and equitable principles, secure a provision against the various exigencies to which they are exposed, and which are so imperfectly remedied by their Benefit Clubs. A public estab., permanent, solid, and respectable, sanctioned by the authority of the Gov., possessed of the best information necessary for calculating annu. and ins., and having agents in different parts of the Kingdom, would prob. render F. Sos. more popular, and their advantages less equivocal. To F. Sos. desirous and susceptible of reform, besides the advantages of safe custody and faithful administration of their funds, such a public estab. would be enabled to furnish regulations framed on equitable principles. The time of payment, amount of subs., ins. of relief for a particular exigency, transferability of int. from one club to another, and a discontinuance of subs., which should still entitle a member to an equivalent for preceding payments, might, in consequence of such reform, be left to the choice of members of Sos. connected with such estab. To persons who from age, sex, religion, employment, or any other cause, were excluded from becoming members of existing F. Sos., it would afford the means of estab. funds on proper principles; and of providing for most of the exigencies that are, and for many that are not, noticed by the clubs, without the intervention of convivial expensive meetings. The present increased pay of the army and navy offers great encouragement for the formation of an estab. suited to their peculiar habits and exigencies (and it is much to be lamented that such a one has not been formed during the present war), for enabling them to secure, from their pay, or their prize-money, a provision for their families in case of their deaths, or an income for themselves in case of maims or superannuation.

The Rep. of the Select Ho. of Commons "Committee of Secrecy" reported this year that F. Sos. had been perverted to purposes most inimical to social order: and that both in the metropolis, and in manufacturing districts, *dangerous meetings had been held under guise of Benefit Clubs for the relief of sick members!* "Association" was said to be the prevailing malady of the times.

About this period too there was another man, famous in Ins. hist.—Mr. John Thomas Barber Beaumont—who took especial interest in the estab. of properly constituted F. Sos.; and much that was accomplished at this date was due to his disinterested endeavours.

The first attempt to calculate the rate of sickness in Scotland, of which we find my record, occurred during this year under the following circumstances: There existed in N.B. the So. or Incorp. of Sailors of Prestonpans. An attempt had been made to set aside its privileges, and also its cap. and constitution; but the members vindicated their rights before the Court of Session, and recovered possession of their funds. Upon the final hearing, the Court directed new regulations to be drawn up, and submitted for approval. This duty devolved on Mr. Charles Oliphant, W.S.—whose name will come before us prominently several times in this art.—the law agent of the Corp. He felt great

difficulty in adapting the future allowances to the revenue; and at length consulted the Rev. Mr. Wilkie, who had pub. a treatise on annu. This gentleman reported upon the subject, and stated it to be impossible to calculate accurately for the schemes of F. Sos. so long as the law of sickness remained to be ascertained. The contributions and allowances proposed by Mr. Wilkie, however, proceeded on the assumption that one-twelfth part of the members would be constantly sick—a proportion which turned out to be too high according to future experience in Scotland.

1802.—The abstract of Poor Returns laid before Parl. this year stated the number of F. Sos. in England to be 9672. In Scotland the Sos. were believed to be more numerous in relation to the pop. than in Eng. (See 1815.)

This year the Rev. John Low pub. *The Advantages of Female Sos.: a Sermon*; and in 1804: *A Sermon preached at the Anniversary Meeting of the Female F. So. at Campsall.*

1803.—There was enacted 43 Geo. III. c. 111—*An Act for enabling F. Sos. intended to be estab. under an Act passed [in 33 Geo. III.—1793] to rectify mistakes made in the Registry of their Rules.* It recited that the Sos. which had exhibited their rules at Quarter Sessions for peculiar jurisdictions, as for boroughs, etc., might exhibit them at Gen. Quarter Sessions for their county or division; and the certificate obtained on such first exhibition should secure the confirmation of their rules, etc., in the proper quarter, and make them valid from the beginning. (See 1809.)

In the 6th ed. of Dr. Price's *Obs. on Reversionary Payments*, pub. this year, and edited by Mr. Wm. Morgan, then Act. of the *Equitable Life*, the latter remarks in the preface:

It is indeed a great misfortune that the different parochial clubs estab. in this kingdom should, in general, be founded on such erroneous principles, and that a disposition so laudable in itself should not be properly directed and encouraged by the legislature. The funds of these clubs have, it is true, been preserved by a late Act of Parl. from the depredations of their treasurers. But it would have been as well, perhaps, if provision had been made in the same Act against the formation of such clubs, or of any So. for the benefit of old age, widows, etc., without having previously submitted their plans to some persons competent to judge of their efficiency. At present they are formed from the crude suggestions of the most ignorant, who, in order to procure a sufficient number of subscribers, often propose the most extravagant terms: so that it soon becomes a matter of very little consequence to the greater part of the subs. whether they are robbed by their treasurer, or ruined by the multitude of their claimants. (See 1819.)

1805.—There was enrolled in Sheffield this year the *Grinders' So.*, the rules of which provided that, if any member, after he had been 6 months therein, be afflicted with sickness or lameness, so as to render him incapable of working, on notice being given to the master before 6 o'clock in the evening, he shall receive, after being 7 days incapable of working, 5s. p. week for 4 weeks of his affliction continuing so long, but to receive no more than 20s.; and every member was to pay 3d. each the third meeting night after, for the same. But if any member fall sick or lame who had been 1 year in the So., and notice given as above, he should receive 10s. p. week for 12 weeks if necessary, and if his illness continued so long; he should afterwards receive 4s. p. week so long as he remained an object of relief. It was further provided that if any member should bring any disorder upon himself by any vicious and disorderly way of living, he should not receive any benefit from the So. And the last rule was that every member of the So. should endeavour, as well by example as precept, to suppress vice and profaneness, to promote the faith and practice of the religion of Jesus Christ, and improve the peace and happiness of that So., to the honour of the town of Sheffield.

It is stated upon authority that there were but 26 of these Sos. existing in France at this date. They increased rapidly after this period, from causes which we have stated in our art. FRANCE, sub-heading *F. Sos.*

1806.—Mr. Peter Colquhoun, LL.D., in his *Treatise on Indigence*, pub. this year, advocated the estab. of a State inst. based upon contributions, after the manner of F. Sos., in view of relieving the wants of the poor in a comprehensive manner. [See POOR, INS. FOR THE.]

Sir Fred. Eden pointed out this year that the necessary consequences of fixing too low a prem. in contribution societies—as nearly all Friendly Sos. are—was the risk which many, “and indeed there is too much reason to fear most of the benefit clubs in this Kingdom are subjected to—that of giving undue advantages to the first and oldest subscribers, at the expense of the young and future members.”

There was pub. by the Rev. John Graham: *Female Benefit Sos. recommended. A Sermon preached before the York Female Benefit So.*

1807.—Mr. John Bone pub.: *The Friend of the Poor: or Considerations addressed principally to Persons of Small Incomes, and Members of F. Sos., recommending them to adopt some more effectual Measures for securing their own Independence, than those proposed to Parl. by Mr. Whitbread are calculated to promote.* This for the most part consists of a puff of the “Office of Tranquillity, or Economical Bank,” an Asso. of which Mr. Bone was the founder, and of which an account will be given under SAVINGS BANKS.

1809.—There was enacted the 49 Geo. III. c. 125—*An Act to Amend an Act made in the Thirty-third year [1793] of His present Majesty for the Encouragement and Relief of F. Sos.*—which recites:

Whereas great advantage has been derived as well to the publick as to individuals by the estab. of F. Sos. under the authority of an Act of the thirty-third year, etc., entitled, etc. And whereas it is expedient to make further provision for the attainment of the good purposes intended thereby,

It was therefore enacted that two Justices of Complaint might enforce observance of any rules, and levy for any money due from members to the So. by distress and sale (sec. 1); and arrears of benefits due to members might be recovered by order of two Justices (sec. 3). The benefits of the Act of 1793 were extended to all Sos. now presenting their rules for confirmation under authority of this Act (sec. 2).

Same year there had been passed the 49 Geo. III. c. 58—*An Act to explain and render more effectual an Act passed in the Parl. of Ireland, in the 36th year of His present Majesty's Reign, for the Encouragement and Relief of F. Sos.*—which enacted that all F. Sos. estab. in Ireland, whether instituted before or after the passing of the Act of 1796, might frame rules for the man. of their funds. Such rules to be submitted to Justices in Quarter Sessions, who might confirm them (sec. 2). Sos. whose rules should be so confirmed to be entitled to the benefit of said Act (3). The funds of such Sos. to be applied to the purposes of the So. only (4). (See 1817.)

About this date there was pub.: *Rules of the Castle Eden So.* "The profits of the publication to go to the funds of the So."

1810.—Odd Fellows.—It would be impossible to regard any history of F. Sos. as at all complete which did not give some account of the origin of those several Orders, secret and otherwise, which now occupy such prominent positions in this country.

The first in point of time as also of magnitude appears to be the *Odd Fellows*, now indeed divided up into several Orders, each of the more important of which we shall speak of under the year of its independent origin.

The first reference to the Order of Odd Fellows in the U.K. is said to date back to the time of De Foe. A later reference occurs in the *Gentleman's Mag.* for 1745. Spry in the *Hist. of Odd Fellows* (Manchester Unity) cites it, and states that their intentions then were to form a select So. whose professed objects should be "to uphold the dignity of the Sovereign of this Realm, to assist one another in times of misfortune, and to amuse and instruct one another. They sought to accomplish this object by meeting together periodically under the presidency of an officer, styled the Noble Grand, who was armed with absolute power and authority to compel obedience, and when a member was called upon to say or do something for the general edification of the Lodge, he had to do so, or forfeit a sum to the Fund of Benevolence. By these means they endeavoured to develop the ability of one another, and no doubt the object sought was attained; and much that was written in the form of essays and read at these meetings was the result of this compulsory mode of seeking instruction. To make the Order binding on its members, they were proposed and seconded by members and received on a ballot by the members present at the meeting." All this simply resembles the practice of the Masonic Orders; and the provident element is not even indicated.

We ought, perhaps, while on the question of the antiquity of the Order, to glance at the contents of a document pub. by some of the managers of the Order, prob. about 1825, for the purpose of enlightening their friends and followers in the U.S., which contained the following:

The origin of the Order is of antique date. It was first estab. by the Roman soldiers in camp, after the Order of the Israelites, during the reign of Nero the Roman Emperor, in the year of Grace 55, at which time they were called Fellow-citizens. The name of Odd Fellow was given to this order of men in the year 79 by Titus Caesar, from the singularity of their notions, and from their knowing each other by night as well as by day; and for their fidelity to him, as well as to their country, he not only gave them the name of Odd Fellows, but at the same time, as a pledge of his friendship, presented them with a dispensation engraved upon a plate of gold, having the following emblems, viz. the Royal Arch of Titus and the Ark of the Covenant, the Golden Candlesticks and Table weighing a great Talent; the Sun for the Noble Grand; the Moon and Stars for the Vice Grand; the Lamb for the Sec.; the Lion for the Guardian; the Dove for the Warden; and the Emblems of Mortality for the Grand Master!

It is further stated "that very prob. the first Odd Fellows made their appearance in N. Wales about this period, as an invasion was made by one of Titus Caesar's generals; and shortly afterwards on the Island of Mona, now called Anglesea." Again: "The first account we have of the Order spreading itself into other countries is in the 5th century, when it was estab. in the Spanish dominions, under the Roman dispensation; in the 6th century by Henry of Portugal; in the 12th century it was estab. in France; and afterwards in England by John de Neville, attended by 5 knights from France, who estab. a Grand Lodge of Honour in London; which Order remained until the 18th century, in the reign of Geo. III., when a part of them formed themselves into a Union, and a portion of them remain unto this day. On this account the Lodges which remain are very numerous throughout the world, and call themselves *The Loyal Ancient Order of Odd Fellows, being a portion of the original body*!" It was admitted that this account was obtained by tradition only, "from past officers of the Order, who were among the originators of it in Manchester." We have seen some similar statements in respect to Masonry, upon which this claim, if not pure invention, must be founded. Mr. Burn (of Glasgow) in his *Historical Sketch of the Manchester Unity* considers the preceding a contemptible effusion.

It is only in the year 1810 that we actually meet with any traces of Odd Fellows Lodges, and these in the neighbourhood of Manchester. It is said that before this date the Lodges in London and elsewhere were simply "free and eases," or drinking clubs—as they would be likely to become, taking Spry's view of their origin as accurate. About

1812 it is stated that a marble mason named Bolton, who had resided in Lond. (but went to Manchester in 1809), was the means of starting an improved Order of Odd Fellows Club or Lodge. His scheme was to throw over the "free and easy" portion of the scheme, and make an effective Provident Inst., adapted to the wants of artisans whose occupations called them into various parts of the Kingdom: hence prob. came the idea of "Independent"—for the Lodges might be independent of each other; while the "Manchester Unity" conveyed the idea of the superior aims in contemplation.

In 1816 the first Corresponding Sec. of the Order was appointed. About this time, too, the first financial step outside the Lodges was taken by establishing a general Funeral Fund in the Manchester District, which distant Lodges were permitted to join on paying an entrance fee. In 1822 the first Ann. Movable Committee was held in Manchester, and power was then given to legislate for the Order. In 1827 the Grand Committee, hitherto elected by the Manchester Lodges which had governed the Order, was superseded by a Board of Directors elected by the Ann. Movable Conference. In 1830 the "Lecture" book was translated into Welsh.

In 1832 the M. U. consisted of 82 Districts, embracing 561 Lodges, and an aggregate of 31,042 members. From this date the increase in the number of members became very rapid.

In 1834 the members of the Order numbered about 60,000.

In 1840 the Order for the first time spread to *Australia*.

In 1841 an important meeting of the Movable Committee was held at the Isle of Man, attended by 308 deputies. The General Laws were revised. A maximum age (40) was now fixed for the admission of candidates. A special committee of 18 was appointed to meet quarterly at Manchester to hear appeals. The number of new members admitted into the Order in the year 1 March 1840 to 1 March 1841 was 41,196. "This number of initiations is far in excess of that attained in any subsequent year."—*Neison*, 1877.

In 1844 the *Income* of the Order from contributions was £245,847 13s. 8d.; from entrance money (initiations), £49,382 9s. 1d.; from fines, goods, and sundries, £29,978 8s. 5d.; total, £325,208 11s. 2d. The *Expenditure* was: Paid to sick members, £107,440 8s. 11d.; for Funerals, District, and Widows' and Orphans' Fund, £62,742 11s. 6d.; for sundries, £71,420 16s. 4d.; total, £241,603 16s. 9d. There was thus a surplus over expenditure of £83,604 14s. 5d.—or nearly 7s. p. member. No doubt the greater part of the £71,420 16s. 4d. "Sundries" was really for *expenses of management*, which were then estimated to be 29 p.c. of the entire disbursements; or 66 p.c. upon the sick allowance paid to members. This announcement led to inquiry and wholesome reduction.

It was in 1845 that more prominent attention was drawn to the Order by Mr. F. G. P. Neison in the first ed. of his *Vital Statistics*. He said the Order then consisted of about 400,000 members, and they were increasing at the rate of about 25,000 p.a. The ann. income was about £250,000; the accumulated funds about £700,000.

The "Initiation Fees" at this date ranged from £1 1s. for ages under 35 up to £5 5s. at age 40. The members paid a uniform contribution of 4d. p. week (17s. 4d. p.a.), for which they were entitled to 10s. p. week during sickness, £10 at death of member, £6 on death of his wife.

Mr. Neison, after an elaborate investigation of the sickness experienced by the members of the Order, came to the conclusion that an add. contribution of 16s. 2d. p.a. was required from each member. He said, "Presuming that no change in the contributions and benefits should take place, and assuming the average age at admission to be 31, which is near the truth, and taking the total number of members . . . at 400,000, a donation or gift of no less than £9,135,000 would be required to enable the Order to meet all its liabilities; and that is taking it for granted that the affairs of these Soss are conducted with proper regard to economy, and the funds invested to yield at least 3 p.c. compound int." This statement was challenged by various members of the Order, more particularly the members of the Kilmarnock Lodges; and Mr. Neison's pamph., *Observations on the Manchester Unity*, etc., contained his reply and reiterations. Mr. Neison at the close of the year pub. *Obs. on Odd Fellows and F. Sos.* This pamph. passed through no less than 14 editions.

Mr. Hardwick, in his *Manual*, speaking of the Manchester Unity at this date, says:

From this period the number of members began to decline. The Ann. Committee held at *Newcastle-upon-Tyne* in 1844 had ordered returns to be sent from all the Lodges of the Unity, with the view to the compilation of proper T. of payments and benefits from the results of the past experience of the So. itself. The Committee had been impelled towards this course by the startling fact that between 100 and 200 Lodges had been compelled to close for want of funds in one year! Several members ignorantly imagining that the Directory wished to get possession of the funds of the various and separate Lodges, or that they purposed covertly "to sell the information to the Gov.," became alarmed, and prevailed upon their branches to refuse compliance with the resolutions of the governing body, though that body had been elected upon the broadest democratic principle. The malcontents were consequently suspended from their connexion with the Order until they furnished the requisite information.

In the following year (1845) the Ann. Committee, which met at *Glasgow*, passed some resolutions which enforced upon the Lodges certain financial improvements. The "Conservative" party rebelled, and a serious crisis resulted, which threatened for a considerable time the very existence of the M. U. The opposing faction struggled with desperate energy for a lengthened period; and much personality

and some irrelevant matter became mixed up with the affair. It ended in what is termed the "national split," or the formation of a separate So. with the title of "National I. O. O. F." The great bulk of the M. U., however, adhered to the law and the executive.

The Corresponding Sec. at the time states, in a pub. document, the number of members in Feb. 1845 to have been 248,526, and estimates the number suspended in consequence of these differences to have been 15,840—the great bulk of whom belonged to the Manchester and Salford districts. . . .

Mr. Neison, jun., in his paper *Some Statistics of the Affiliated Orders* (1877), says :

At the end of 1845 serious dissensions arose in the Order, and so great was the distrust engendered, that though the initiations were at the rate of over 10,000 p.a., the secessions far outnumbered them, and thus the numerical strength of the So. decreased until on 1st Jan. 1845, the minimum of 224,441 members was attained. *From a financial point of view this large decrease at that period in the numerical force of the Unity was not without a very material advantage to the So., inasmuch as the rates of contribution in use prior to the A. M. Committee of Preston in 1853 were far from being adequate for the benefits promised. The decrease of numbers thus operated advantageously in the financial interests of the Order.*

In 1846 the Ann. Committee met at *Bristol*, and there came to the important resolution of directing the compilation of T. of Sickness and Mort. based on the experience of the Order. This work was undertaken by Mr. Henry Ratcliffe, Corresponding Sec.: and his Rep. was pub. in 1850. Of this we shall give a full abstract under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.

The attention which had been drawn to the financial condition of the Order for several years prior to this date led to an announcement of the fact, that of the various Lodges which had been formed during the early part of this century, not one had survived more than 15 years. During the year 1848 no less than 138 Lodges closed for want of sufficient funds; while in 1847 there had closed from the same cause 81; and in 1843 no less than 225 Lodges! [many of these formed the nucleus of the *Nottingham Order*]. In 1844 upwards of 40,000 members joined the So., but in the same year about 20,000 left—*vide Quarterly Reports, 1845.*

About this date (1848) the Gen. Sec. of the Order obtained possession of about £4000 of the funds of the Order, and the members could not recover—the So. not being enrolled. The Sec. pleaded that he was a partner, and had as much right to the money as any one else. He was tried at *Liverpool*, and on this plea acquitted!

In the preface to the Laws for the Gov. of the Order in force about this date, we find the following :

. . . . The Lodge is always considered as sacred ground, and no sooner do those who in any other place might meet together as enemies enter into its precincts than their bad feelings seem to vanish as if by magic, and in their stead the desire to promote the well-being and happiness of all reigns predominant. We see mingling together men of all nations, all creeds and every grade of politics; and all behaving in a respectful and friendly manner towards each other. The prejudices which are engendered by being born in a different land, and sectarian feeling which is apt to prevail among religious enthusiasts, and the heart-burnings of violent political partisans, are all for the time obliterated and forgotten by those who meet together in the Temples of Odd Fellowship. There must be some great and good moral principle amongst us, by the aid of which we can accomplish all this; there must be some powerful and virtuous influence connected with the Order, which neither the slanders of the malicious, the arguments of the prejudiced, nor the sneers of the ignorant, can prevent from having a vast and beneficial effect upon the destinies of mankind.

That we have continued to go on in a course of prosperity and harmony for such a length of time is a proof that our constitution is a healthy one, and that the laws for our government have been carefully and judiciously constructed. Nevertheless, as there is no human inst. which can boast of perfectibility, it has been considered necessary that our code of laws should be revised by competent persons, and adapted to our increased numbers and intelligence. This has now been done, and it is hoped that the labour which has been bestowed upon the following pages will be found not to have been in vain.

In one of the publications of the Order, preceding this date, it was set forth : "If fond of company, an Odd Fellow can never be at a loss for a companion or friend; he may select from so extensive a body some whose sentiments are congenial with his own. Hence the Lodge may be considered as a useful school of morality, where, from various humours, tempers, customs, and circumstances of life, a considerable portion of useful knowledge may be acquired relative to men and things." There was also given a collection of festive songs suited to the recurring events in the Order; these are said to have been all set to one tune—here is a specimen :

"Hail, Chief Elect! Odd Fellows pride,
We hail thee welcome to the Chair;
May'st thou with Honour here preside,
Promote our mirth, and banish Care.
All Odd Fellows shall be then
Bless'd by God, and lov'd by Men."

This was all in accordance with the admitted origin of the Order. Of late years festivities of the character here indicated have been much abated, and in many districts entirely abandoned. The Order has happily assumed an almost entirely business character.

In 1849 a House of Lords Committee sat, mainly in view of considering and removing obstacles to the various Lodges of the Order becoming enrolled.

In 1851 the Gen. Laws of the Order were enrolled under the F. S. Acts, the name taken being the *Independent Order of Odd Fellows, Manchester Unity F. So.*

In 1852 the Ann. Committee, *Carlisle*, requested the Board of Directors to frame contributions and benefits in accordance with the experience of the Order pub. 1850. "From this time (says the Hon. E. Lyulph Stanley, one of the Assistant Commissioners to F. S. Commission of 1870), the Order has gone on making amendments from time

263,584 married, and 112,926 unmarried members. In many of the smaller Orders it was supposed that the proportion married would be larger.

The "Supplementary Rep." July 1, 1872, pub. by Mr. Henry Ratcliffe, contains much valuable statistical information regarding the Order, which will be reviewed under F. Sols., MORT. AND SICKNESS EXPERIENCE OF.

On the 1st Jan. 1873, the number of members was 470,043; the accumulated funds £3,223,323.

The "off-shoots" from the Order, either arising from splits, or as being "improvements,"

are numerous: the chief—13—named in the degree of their magnitude are as follows:

1. Grand United Order of O. F. 2. Nottingham Ancient Imperial Order of O. F. 3. Ancient Noble Order of United O. F., *Bolton* Unity. 4. British United Order of O. F. 5. Independent Order of O. F., *London* Unity. 6. Independent Order of O. F., *Kingston* Unity. 7. Improved Independent Order of O. F., *South London* Unity. 8. Independent Order of O. F., *Norfolk and Norwich* Unity. 9. Albion Order of O. F. 10. Wolverhampton Order of O. F. 11. Derby Midland Order of O. F. 12. Ilkeston and Erwash Valley Order of O. F. 13. Ancient Independent Order of O. F., *Kent* Unity. These were estimated in 1872 to contain an aggregate of 200,884 members. But in add. there is the Independent Order of O. F. in the *United States*, which in 1869 had (according to the *American Odd Fellow*) nearly 300,000 members. The first Lodge was opened at *Baltimore* in 1820 (vide *Hardwick's Manual*, 2nd ed., p. 25).

The total number of members of the Odd Fellows Lodges of the world therefore exceeds 1,000,000.

Mr. Neison, jun., has reduced the numerical changes in the Order between the years 1848 and 1876 into the form of a Dr. and Cr. account as follows:

No. of members on 1 Jan. 1848	249,261	Lodges closed (members).....	19,997
Initiations since	678,560	" seceded "	16,812
Increase in Colonies, etc.	27,370	" suspended "	21,226
Re-admitted	781	" expelled "	2,837
		Deaths.....	115,245
		Voluntary resignations	271,842
		No. of members on 1 Jan. 1876	508,013
Total	955,972	Total	955,972

Mr. Neison remarks upon the "Voluntary Resignations" as follows: "Those well acquainted with F. Sols. are aware that the per-centage of members allowing their membership to lapse through non-payment of contributions is always large, especially among the younger members." Confining our attention to the United Kingdom only for the period 1863-76, the retiring members are accounted for as follows: from Lodges closed 2391; from Lodges seceded 6830; from Lodges suspended 14,274; from Lodges expelled 1140; voluntary resignations 160,315—total 184,950." The members remaining were 468,387. Many other details of interest are given in that paper, which we cannot here enter upon.

The constitution of the Order is now as follows: Members join Lodges in various parts of the country, and are primarily members of their own Lodge, to which they pay their contributions, and on whose funds they have a claim when they become entitled to benefits. Each Lodge has separate control over its own funds, and a separate set of Trustees. These Lodges, which average about 110 to 120 members each, are grouped into Districts, having usually about 9 Lodges to a District—or about 1000 members.

The "Districts" perform two principal functions: (1) exercise control over "Lodge" affairs, as to observance of rules, etc.; (2) administer the payments on deaths. The District is governed by meetings composed of delegates from the Lodges; they are required to meet at least half-yearly, but usually meet quarterly. They levy upon the Lodges for the funeral claims of the quarter. Some districts levy a fixed sum every year, and so accumulate a fund separate from the Lodge funds, for the purpose of paying these claims. The levies on the Lodges of the whole Order amounted in 1871 to 3s. 9d. per head for funerals. The District audits the Lodge accounts.

There are in this Order a number of single Lodges which form Districts by themselves. This is contrary to the policy of the Order, and is not now permitted in the case of new Lodges.

There is usually in connexion with the District a "Widows and Orphans' Fund;" but contribution to this is entirely optional, and the affairs are managed by the District for the benefit of the families of contributing members.

The cost of management of the District is met by a separate levy, which is paid not out of the general fund, but from the man. fund of the separate Lodges. The principal items are the salary of the District Sec., the rent of the rooms for meeting, the delegates who are paid for attendance, and the printing the Reports. These District Reports often contain much information of interest and sometimes of value.

Another function of the District is to relieve members of the Order who are travelling in search of work. The member obtains a card on starting, and is entitled to relief as he goes from town to town. In each District there is a relieving officer, whose duty it is to

pay the money and fill up the card. The money so disbursed is levied upon the man. fund of the Lodge, and not upon the sick fund; but the whole amount now expended in this manner is so small as hardly to be taken into account. The right, however, to such an allowance has formed an attractive feature towards the "Affiliated Orders."

Controlling the Districts and the general affairs of the Order, stands the Board of Directors. Its meetings are quarterly, or oftener if necessary. The duties consist, beyond the gen. bus., in hearing "appeals." The Board consists of the Grand Master and Deputy Grand Master, the last Past G. M. and 9 persons elected ann. at the Ann. Movable Conference, and the Corresponding Sec. of the Order. The Directors are paid a moderate remuneration and travelling expenses.

The mode of settling *Disputes* is as follows: If the matter is a grave one involving 21s. as a minimum, it is brought before a summoned meeting of the Lodge, the "charges" being stated. There is a regular hearing; and where the decision is not satisfactory to either party, there is an appeal to arbitrators, or to a District meeting when no arbitrators have been appointed. In the case of a dispute between 2 Lodges, or of a member of one Lodge with another Lodge, the dispute goes straight to the District; and where a charge is brought by a Lodge officer or member against any Lodge officer or member of another District, the case is referred to the arbitration of the District meeting to which the party complained of belongs. There is a final appeal to the Board of Directors, whose decision is conclusive.

The members of the Order are entitled to a "clearance," which is a trans. of the member with his liabilities from one Lodge to another. He enters the new Lodge on the same terms as his former one, irrespective of his then age. The former Lodge is charged with the retiring member's risk for the first year after his departure, as a consideration for freedom from future liabilities. The plan is not regarded as working entirely satisfactorily. Members away from their own Lodge, but not desirous of withdrawing, have the advantage of paying to the Lodge nearest to them as agent for their own Lodge. The member pays all necessary postage and 1s. p.a. to the Sec. of the Lodge while this agency continues.

The Order has almost a *Literature* of its own. Beyond the works already noticed, there is Hardwick's *Manual for Patrons and Members of F. Sos.* (1859), giving much information as to this Order; Mr. Neison, jun., *Manchester Unity of Odd Fellows* (1869); and the *Odd Fellows Quarterly Mag.*, ed. by Mr. Charles Hardwick. Many other pamphlets and lectures relating to the Order are mentioned in this course of this art.

The *Independent Order of Odd Fellows* is now one of the largest Provident Inst. in the world; and is entirely self-governed.

1811.—In the appendix to the *First Report of the So. for Bettering the Condition of the Poor at Liverpool*, pub. this year, there was contained a scheme of graduated contributions in relation to the benefits desired, and the ages of the members on admission, which had been settled for the Liverpool F. So. by Mr. Wm. Morgan, then Act. of the *Equitable Life*, and which embodied the following features: Class I. Members who were to receive relief in case of *sickness* only. Class II. Members who were to receive relief in sickness and annu. in old age. Class III. Members who were to receive annu. in old age only.

1812.—In an art. in the *Quarterly Review* for Dec. this year, entitled "Inquiry into the Poor Laws, etc.," there occurs the following passage:

Our Benefit Sos. (in their origin as old as the Saxon Guilds), which, in their right application, are so excellent, and which have so properly been encouraged by the legislature, have been perverted to the most perilous purposes. The number of persons who belonged to these Sos. 10 years ago, when the poor returns were made, amounted to 704,350, of whom nearly half at least may be supposed to belong to the manufacturing class. When the Luddites began to organize themselves, the funds of the Sos. to which they belonged afforded them a ready supply; and when further resources were needful, they knew how to raise a revenue as well as the skilfullest financiers of Downing Street. In this country journeymen have long been accustomed to combine for the purpose of obtaining higher pay from their employers; each trade has its fund for such occasions, raised by weekly or monthly payments; the different trades assist each other in their combinations; and the bus. is managed by secret committees. . . . Such then are the means which the disaffected part of the pop. have in their hands. (See 1816.)

1814.—There was pub. by Jerome Count de Salis, "of the Holy Roman Empire," F.R.S.: *A Proposal for improving the System of F. Sos., or of Poor Assu. Offices; and, by increasing their Funds, rendering, in Process of Time, on the Principle of Accumulation, all Parochial Taxation for the Relief of the Poor unnecessary. Most respectfully submitted to the Landed Interest of that Part of the U.K. called England.* His proposal was that F. Sos. should be called "Poor Assurance Offices," and that they might be placed under the control of the Lord of the Manor, or of the Churchwardens and Overseers of the Poor, avowedly for the purpose of conducting them solely in view of the reduction of the poor-rate. Where several F. Sos. existed in one parish, they should be united. (See POOR, INS. FOR THE.)

About this date there was pub.: *Benefit Societies versus Savings Banks and Ins. Cos. An Address to the Members of Benefit Sos. and the Public in general, showing the Utility that Benefit Sos. are to the Community at large—the Assistance they are to the already overburdened Poor-rates—the Contrast between a Benefit So. and an Ins. Co.—also the Deceptions, Pains, and Penalties of the latter, and the Necessity of all Classes encouraging Benefit Sos. in Preference to Savings Banks or Ins. Cos.* By the Founder of the "St. Anne's Union," "True Sons of Equity," "Oxford Good Intent," "Provident Fund," etc.

The pamphlet passed into a second edition.

1815.—Mr. Marshall, in his *Mort. of the Metropolis* (pub. 1832), gives a return of the number of persons in F. Sos. in the City of Lond. and also in the County of Middlesex, at this and other dates, as follows :

	1803.	1813.	1814.	1815.
City of London	4,047	3,753	3,944	4,535
County of Middlesex	72,741	57,340	57,213	67,186

His authority was a Parl. Return relating to the Poor, pub. this year.

In the same return the total number of members in the F. Sos. of Gt. Brit. was stated to be 925,489. The number of Sos. was not given; but assuming them to bear the same proportion to members as in 1802, they would reach 12,678. (See 1823.)

It was stated by a writer in the *Edinburgh Review* [Jan. 1820, p. 158] that F. Sos. "included above an eighth part of the pop. of the empire." This surely was an over-estimate!

1816.—In an art. in the *Quarterly Review* for April of this year on "The Poor," there occur the following obs. on F. Sos. :

The advantage of such Sos. might fairly be inferred from their antiquity; they are known to have existed in some of the ancient Greek Republics; traces of them are found among our Anglo-Saxon ancestors; and what is more remarkable, inst. of a similar purport have been discovered in some of the South Sea Islands, among a people still barbarous enough to delight in devouring the flesh of their enemies. There is much good in these Sos.; and the protection which Government has given them has been found of considerable use. . . . The protection would have been more efficacious if . . . a power of effectual interposition had been given to the magistrates; but this intention was very properly given up when it was ascertained that the members were jealous of such interference. In the neighbourhood of Lond., a majority of one of these Sos., all young men, passed a vote for dissolving the So. and dividing the stock: thus defrauding the old members of that provision for age and infirmity, for which they had so long contributed: the young villains then formed a new So. among themselves, and left the old men to the parish. No magistrate would have permitted of such impudent iniquity as this.

The number of persons enrolled in these asso. would decidedly prove that there is by no means a general want of forethought among the lower classes. There is nothing attractive in their object—the weekly or monthly payment is not a deposit made by hopeful industry for future comfort and enjoyment; but a provision against sickness and the inevitable infirmities of old age, and the expenses attendant upon death. It is not a little honourable to the national character that among the un-instructed ranks who stand in need of such a provision, so large a proportion should be found who are mindful of the decline of life, and prepare this melancholy resource for themselves and their widows. . . . It would scarcely be too much to affirm that a more beneficial inst. has never been devised since the foundations of civilized society were laid; and scarcely too much to hope that it may operate as a sinking fund toward the extinction of the poor-rates—as a moral vaccination against the spreading infection of pauperism and misery.

In the same publication in Oct. this year there was an art. on Savings Banks, wherein some further useful observations are made on F. Sos.

The estab. of Corporation Boxes, and of Male F. Sos., the former of which are of great antiquity, and the latter nearly a century old, has to a certain extent counteracted the pressure of poor-rates, and the growth of those baneful habits of dependence, which it cannot be denied that poor-rates are calculated to produce. By the Act for the Encouragement of F. Sos. . . . which was passed in the year 1793, much good has been done. In it no attempt was made to alter the popular frame of these asso.—far less to render the entrance into them compulsory. . . .

Much has been said of the dangerous purposes to which these asso. may be turned. Mr. Rose, certainly not a partial judge in such a case, intimates that he believes such apprehensions to be chimerical; and expressly declares that, "though he has sought anxiously for information on that head, he has not been able to discover a single instance where those consequences have followed in the case of a So. whose rules were regis. according to law." . . .

F. Sos. partake of the nature of ins. on life and property, by promising certain advantages in the event of certain casualties or contingencies. They are preferable, however, to common ins. offices, inasmuch as the members insure each other, and retain all the profits in their own hands for the general advantage. There is also a benevolent principle intimately blended with F. Sos. which leads those who form them to be concerned for each other's welfare, and to consult for each other's good. . . .

Savings Banks were thought to be a fit adjunct to these.

During this year there was founded the *Benevolent Whip So.*—consisting, we believe, of members engaged in the manufacture of cart, coach, and other whips. The sickness experience of this So. proved so excessive as to be 145 p.c. beyond the experience of F. Sos. in E. & W. as demonstrated by Mr. Neison's T. in 1845. The managers of the So. had themselves discovered this fact, and had a rep. printed on the subject. Mr. Tidd Pratt called the attention of Mr. Neison to it; and he mentioned the fact in his evidence before the Lords Committee on F. Sos. in 1848. Mr. Neison said he had investigated the question minutely, "to see whether there was any accidental circumstance which would account for the excess of sickness, and I could not find that the results were peculiar to any one year—the rate of sickness being as uniform as the small numbers in the So. would permit." The experience of this So. was quoted to show that a general T. is no sufficient guide where a So. is to consist of the members of any one trade or calling.

Same year the Rev. Richard Vivian pub. *Letter on F. Sos.*, etc., wherein was contained the "Rules of the Male Benefit So. at Bushey, in Hertfordshire, instituted in the year 1805," by that gentleman; and also the Female F. So. of the same place.

There was pub. in Edin.: *An Essay on the Nature and Advantages of Parish Banks, for the Savings of the Industrious*: 2nd ed. greatly altered and enlarged by an Account of the Rise and Progress of the Scheme; and Remarks upon the Propriety of uniting these Inst. with F. Sos.; together with an Appendix containing a copy of the Rules of the Dumfries Parish Bank, an account of such banks as differ from that of Dumfries, and some cursory obs. on F. Sos.

1817.—During this year two Acts were passed, each of which conferred benefits upon F. Sos.: 1. The 57 Geo. III. c. 39, under which equitable relief in regard to public funds was extended to F. Sos. 2. The 57 Geo. III. c. 130—the Savings Bank Act—which, while not intended to benefit F. Sos., did so in a very marked manner, by allowing these banks to receive deposits from F. Sos., and thus to enjoy the benefit of the high interest secured by Gov. debentures. (See 1819.)

During this year there was also enacted 57 Geo. III. c. 19—*An Act for the more effectually preventing Seditious Meetings and Assemblies*—sec. 24 of which recites:

And whereas divers Sos. or Clubs have been instituted in the Metropolis and in various parts of the Kingdom, of a dangerous nature and tendency, inconsistent with the public tranquillity, and the existence of the estab. Gov., Laws and Constitution of the Kingdom; and the members of many of such Sos. or Clubs have taken unlawful oaths and engagements of fidelity and secrecy, and have taken, or subscribed, or assented to, illegal tests and declarations; and many of the said Sos. or Clubs elect, appoint, or employ committees, delegates, representatives, or missionaries of such Sos. or Clubs, to meet, confer, communicate or correspond with other Sos. or Clubs, or with delegates, representatives, or missionaries of such other Sos. or Clubs, and to induce and persuade other persons to become members thereof, and by such means maintain an influence over large bodies of men, and delude many ignorant and unwary persons into the commission of acts highly criminal: And whereas certain Sos. or Clubs calling themselves *Spenceans* or *Spencean Philanthropists* hold and profess for their object, the confiscation and division of the land, and the extinction of the funded property of the Kingdom: And whereas it is expedient and necessary that all such Sos. and Clubs as aforesaid should be utterly suppressed and prohibited as unlawful combinations and confederacies, highly dangerous to the peace and tranquillity of this Kingdom, and to the Constitution and Gov. thereof as by law appointed.

It was therefore enacted that from and after the passing of this Act all Sos. or Clubs such as those previously described, "and all other Sos. or Clubs, by whatever name or description the same shall be called or known," who held and professed the same doctrines, were to be utterly suppressed, as being unlawful combinations against the peace and security of H. M.'s liege subjects.

It was further declared (sec. 15) that sos. taking unlawful oaths, or requiring tests or declarations not required by law, or electing committees, delegates, etc., should be deemed guilty of unlawful combination within the already recited Act of 1799; and persons becoming members thereof were to be deemed guilty of unlawful combination, and to be proceeded against accordingly.

There was again a proviso of exemption in favour of *Freemasons Lodges*, under the conditions of the Act of 1799; and which extended "to any meeting or So. formed or assembled for purposes of a religious or charitable nature only, and in which no other matter or bus. whatsoever should be treated of or discussed."

It may seem to us, at this remote period, that neither this measure, nor that of 1799, could have been aimed at, or even twisted into a meaning adverse to, the extension of F. Sos., which the legislature had long assumed to encourage by all possible means. Those, however, who are familiar with the administration of the law at this period will see the danger to which members of the Secret Orders of F. Sos. were exposed; and subsequent events will show that this danger was regarded as a real one. (See 1844.)

The celebrated Rep. made this year by a Select Parl. Committee on the Poor Law refers to a proposition which had been made to enable parishes to become contributors to F. Sos., or to guarantee the benefits of them to individuals; and it gives the answers to various problems in connexion therewith which had been submitted to Mr. Wm. Morgan and Mr. Francis Baily respectively. The difference in the values they assigned were so startling as to show that one or the other must have failed to comprehend the views of the Committee. Those who desire to become acquainted with the details may consult either the Rep. itself, or Appendix D. of the Rep. of the Select Parl. Committee on F. Sos. 1825.

Mr. John Barton pub. a pamph.: *On the Condition of the Labouring Classes*, wherein, speaking of the instability of F. Sos., which he regarded as "universal," he says:

It is uncommon for a F. So. to last more than 50 years—very uncommon to last 50 years without beginning to exhibit symptoms of decline. I have taken great pains to discover the causes of this fatal tendency, by an examination of the accounts of the different Sos., and am prepared to say, that in the great majority of cases, it arises from a defect in the orig. plan, and not from mismanagement or knavery.

He had examined, and gave in an appendix extracts from the records of several sos. which he considered as among the best managed, and says:

From these it will appear that even Dr. Price did not estimate correctly the proportion of sick members to well, in these Sos. He supposed that in a So. where the age of admission is limited to 32 years, the proportion of sick will be 1-48th of the whole. But it will be seen that in the first of these Sos. [named in his appendix], situate in the outskirts of the metropolis, the proportion of members in receipt of pay is 1-31st; in the 3 next, situate in provincial towns, 1-35th; and in the last, situate in a country village, 1-40th. It is the more important that the result of these inquiries should be known, as Mr. Morgan has stated in his examination before the Committee on the Poor Laws, that all the experience he has had confirms in his mind the accuracy of Dr. Price's T. I am unable to state even loosely the proportion of members superannuated, that is, rendered permanently incapable of earning a livelihood. The accounts of various Sos. vary incredibly in this particular; and I suspect that claimants of this description are in many cases used very ill by their more fortunate associates, in being debarred from that relief to which they are fairly entitled. Dr. Price has substituted allowances after a certain age, as 65 or 70, for allowances to superannuated members. But this does not at all meet the wants or wishes of the poor. Some men are permanently incapacitated from labour at 25; others are quite able to maintain themselves at 75.

Dr. Price has conjectured *that the chance of sickness at every period of life bears a certain proportion to the chance of death.* The 9th T. was framed with a view to discover how far this suggestion is correct; and the result shows that it is very nearly so.

Mr. Morgan found that the average results of the sickness experience which the several Sos. named by Mr. Barton had incurred was 1 member in 35'33; while Dr. Price, over the average of all ages, had given it at 1 in 34.

1818.—It is a matter of historical interest to note that in a Bill before Parl. this year for the regulation of F. Sos. there was contained the clause following:

That the Lord High Treasurer, or Commissioners of H. M.'s Treasury, shall, within 3 months after the passing of this Act, nominate and appoint 5 or more persons skilled in arithmetical calculations, to be a Committee for the purposes of this Act; and any so. or inst. submitting T. or rules to such Committee for approbation shall pay to such Committee such reasonable fee or fees as the said Lord High Treasurer, or Commissioners of H. M.'s Treasury, shall appoint; and the amount of such fees shall be applied under the direction of the said Lord High Treasurer, or Commissioners of H. M.'s Treasury, towards remunerating the said professional members of the said Committee, and otherwise defraying the incidental expenses attending the execution of this Act.

This clause was omitted from the Bill introduced in the following year (and which we shall see became law) in consequence of the alarm which it had occasioned in the North of Eng., of an intention on the part of the Gov. to interfere with the funds of the Sos.

It is curious to note in this and other instances mentioned in this art., the absolute want of confidence the industrial classes had in the intentions of the Gov. In principle, we fear this distrust was too often well founded.

There was founded this year one of the earliest County F. Sos.—the *Essex Provident* So. It was estab. at *Chelmsford*, but soon extended itself through the county by means of "agencies," branches not then being permitted [see 1846]. The management of the So. rested mainly with the hon. members, having local Committees at the branches. What its orig. scale of contribution may have been we do not know. It afterwards adopted rates deduced from the Highland Sos. Experience, 1824. In 1843 the So. had 5500 subscribing members. By 1848 it had 7146 members, and an accumulated fund of £33,000. Mr. Ansell was then consulted, and made a valuation of its affairs. He pronounced a deficiency of £41,941; but upon a re-valuation, reduced this to £23,000.

On this state of things becoming known, a general meeting of the members was called; but as no alteration in the rules could be made without the concurrence of three-fourths of the members present; and as members in the agricultural districts are not usually alive to actuarial questions, it is not to be much wondered that the proposed reforms, in the shape of increased contributions and curtailed allowances, were not adopted in their entirety. The Rev. John Bramston (then Vicar of Witham) fought nobly and continuously on the side of safety, giving alike time and money to the cause, but with small avail. It was on this occasion that the present writer was first consulted in regard to the mort. experience of F. Sos.; and he has taken a deep interest in the subject ever since. (See 1828.)

On this occasion Mr. Martin, a working member of the So., made a rep. on and a valuation of the affairs of the So., combatting the position taken by Mr. Ansell, and evincing therein considerable ability. He predicted that the So. could pull through; and so far his prediction has been verified.

In 1845 Mr. F. G. P. Neison's *Contributions to V. Statistics* appeared; and therein was contained a comparison between the sickness experience of this and the *Wiltshire* F. So., made upon the supposition that the two Sos. were founded in the same year (1828), which does not turn out to be the fact; still the comparison is interesting.

In 1846 the So. re-regis. under the F. Sos. Acts in view of securing amended powers for alteration of rules, etc.

In the Rep. of Sir Geo. Young, one of the Assistant Commissioners under the F. Sos. Commission of 1870, there occurs the following:

The results of deficient supervision on the part of "the gentlemen," and of the attempt to combine the merits of both patronized and popular sos., are exemplified in the hist. of the *Essex Prov.* So. In this Club, which has been quoted as upsetting the actuarial conclusions arrived at through the experience of others, it appears that the rates were orig. insufficient, and had been seriously incroached upon by the temporary abandonment of the "extra payment" charged in respect of funeral benefits. After the rates had been raised, in partial execution of an actuary's peremptory recommendations, no steps were taken to retrieve lost ground. The new rates, there is grave reason to believe, were still deficient; and with these the Club continued to invite new members, whose accumulations were carried to the same account as those of the older members. To such an extent did the Club fall into the hands of these older members, that all the savings of the younger men are now passing year by year into the gulf created by their demands; a disproportionate number of them are in the receipt of a superannuation pay for life, equal to half of the sick pay for which they subscribed—a proportion enough to break the back of any club; and by a provision which would at this present day be thought preposterous, a considerable number of these pensioners are allowed to be earning wages, as "privileged" members, in consideration of a very small reduction in their weekly pension. *The secret is that in these and other matters of expenditure the District Committees exercise full power, with no control whatever from the central administration; and that in matters of legislation it has not been the custom for the hon. members to interfere.*

In 1872 Mr. Neison, jun., made a rep. upon the affairs of the So., and found the deficiency then was £79,359 18s. 8d. But this was arrived at as follows: the deficiency on what is now termed the "old series" was £89,662 17s. 6d.; but the "new series" was solvent, having a surplus of £10,302 18s. 10d.; this reduced the deficiency over the whole So. to the sum first stated.

Here, then, is a So. which has survived for over a quarter of a century with a "weight of deficit" which, it might have been supposed, would work its own ruin; but new members have been found willing to come in and take their share of the burden. Happily, an effort has now been made to place the So. on a proper footing.

At a gen. meeting held 6 May, 1873, it was resolved—1. To abolish the benefit on death of members' wives, which had long been known to be one cause of the deficiency. 2. To reduce by $12\frac{1}{2}$ p.c. the benefit for incapacity to labour. 3. To confer much greater power on the Executive Committee.

Under its new rules, the So. will consist as heretofore of 20 Districts, each with a District Committee appointed by its members, and each electing, according to size, one or more representatives, who form together the Executive Committee. The District Committee are to provide for their own management expenses, and the members in each District are to elect their ann. medical officers. Herein is a resemblance to the Affiliated So. plan—only applied to a limited area.

One peculiar feature of this So. is that of District "collectors," elected by the members of their district, and paid by scale, viz. head-money according to the number of members, viz. if not exceeding 200, then $5\frac{1}{2}d.$ each p. quarter; over 200 and not 400, $4\frac{1}{2}d.$; from 400 to 600, $3d.$; over 600, $2d.$

The Chelmsford F. So. is an offshoot of this, in 1844. The comparison of mort. follows hist. of Wiltshire So. given in 1828.

Burial Sos.—There was founded this year in Manchester—apparently the first of a class of F. Sos., which have since assumed vast proportions—the *New United Friendly Burial So.* This So. had at the close of 1875 about 16,586 members, and £3627 of assets. It only stood No. 13 of Burial Sos. as regards numbers. (See 1829, 1832, 1837, 1850, etc.)

There was pub. this year in Bristol by Mr. J. H. Moggeridge: *Remarks on the Rep. of the Select Committee of the House of Commons on the Poor Laws*, wherein the author estimated that the contributions now made by the members of F. Sos. equalled the whole amount which had been levied for the poor-rate in 1776.

1819.—There was enacted 59 Geo. III. c. 128—*An Act for the further Protection and Encouragement of F. Sos., and for Preventing Frauds and Abuses therein*—which sets forth in its preamble:

Whereas the habitual reliance of poor persons upon parochial relief rather than upon their own industry, tends to the moral deterioration of the people, and to the accumulation of heavy burthens upon parishes; and it is desirable, with a view as well to the reduction of the assessments made for the relief of the poor, as to the improvement of the habits of the people, that encouragement should be afforded to persons desirous of making provision for themselves or their families out of the fruits of their own industry: And whereas by the contribution of the savings of many persons to one common fund, the most effectual provision may be made for the casualties affecting all the contributors; and it is therefore desirable to afford further facilities and add. security to persons who may be willing to unite in appropriating small sums from time to time to the formation of a common fund for the purposes aforesaid; and it is desirable to protect such persons against the effects of fraud or miscalculation.

Then, after reciting the Acts of 1793, 1795, 1803, and 1809, it is also recited: "And whereas the provisions of those Acts have been found insufficient for their purposes, and great abuses have prevailed in many sos. estab. under the authority of such Acts." It is then enacted that future F. Sos. were not to have the benefit of former Acts *unless constituted in accordance with this Act.*

II. And be it further enacted, That when any numbers of persons in Eng. or Wales shall intend to form, under the authority of this Act, a F. So. or Inst. whereby it is intended to provide by contribution on the principle of mut. ins. for the maintenance or assistance of the contributors thereto, their wives or children, in sickness, infancy, advanced age, widowhood, or any other natural state or contingency, whereof the occurrence is susceptible of calculation by way of average, it shall be lawful for such persons to make application by memorial signed as hereinafter mentioned, to the Justices assembled at the General Quarter Sessions of the Peace, or any adjournment thereof, in and for the county, riding, or place of separate jurisdiction, wherein such So. is about to be estab., for a confirmation and approval of the rules of such intended inst., and of the tables of payments and allowances to be adopted therein; and that if such Justices, etc., shall, after due examination thereof, be satisfied that the contingencies for which it is intended to provide, whether specifically named in this Act or not, are such as according to the true meaning and intent of this Act are fit to be provided for by such So., and shall deem the rules and T. of such So., either in the form in which they shall have been orig. exhibited, or with such omissions, add. or alterations as may be made therein by the said Justices, with the consent of the persons proposing to be trustees of such So., to be fit and proper, and shall be satisfied that the formation of such So. will be useful and beneficial, regard being had to the existence of any other So. already formed under wholesome rules within the same district for the like purposes; the said rules and T. so confirmed or amended, shall be deposited and enrolled according to the provisions of the said first mentioned Act [1793], and a copy thereof authenticated by the signature of two or more Justices shall be delivered to the trustees of such So., and shall thenceforward become the rules of such So., and shall be binding on all parties concerned: *Provided always that such Justices shall not confirm and allow any T. of payments or benefits, or any rules dependent upon or connected with the calculations thereof, until it shall have been made to appear to such Justices that the said T. and rules are such as have been approved of by two persons at least, known to be professional actuaries or persons skilled in calculation, as fit and proper according to the most correct calculation, of which the nature of the case will admit.*

The Justices assembled in Q. Sessions might pub. general rules for the formation and government of such sos.; and Petty Sessions might act upon and confirm such rules (3). Trustees of such sos. in future to be substantial householders (4). Alteration of rules

to be made by memorial to Justices in Gen. or Petty Sessions (5). Treasurer and officers to give security; securities exempt from stamp duties (6). Property of sos. to vest in trustees, who might sue or be sued (7).

No dissolution of a so. or division of its funds to take place without consent of trustees or the majority of them (8). The place of meeting and powers and duties of members to be specified in the rules of Sos. to be certified under this Act (9). Funds might be invested in Savings Banks, or in Bank of England to account of Commissioners for the Reduction of National Debt, or in the public funds, or on real security (10-12). In case of expected deficiency in funds of So. for the purposes contemplated by it, statement to be submitted to Justices, who might make order for adjustment of the rights of all parties, subject to appeal to Justices in Q. Sessions, whose decision should be final and conclusive (14). In cases of complaint by widows or children of deceased members, Justices to have jurisdiction (15). The provisions of the Acts of 1793 and 1809 to be applicable to all Sos. formed under this Act, where not repugnant to the provisions of this Act (16). (See 1829.)

From the date of the passing of this Act it may be said to have been almost practically impossible for any so. to undertake to provide (1) money allowances in case of their members being sent to prison for debt; (2) money allowances for providing a substitute in case of being drawn for militia service; or (3) any pecuniary compensation (however small) in case of fire. It was now clearly seen that these were not objects intended to be insured for or against in F. Sos. Up to this time such provisions had prevailed—although happily they were not at all general.

One of the earliest Sos. presenting its rules in Lond. for confirmation under this Act was "The New Union Benevolent Whip Club," held at the "Bear and Staff," Smithfield.

1820.—The Highland So. this year, on the motion of Charles Oliphant, W.S., offered two prem. of 20 guineas each for the two best returns from F. Sos. in Scotland, and as a consequence received communications from 79 of these, situate in 16 different counties, and embracing various periods, from 3 to 75 years. Upon the returns so obtained was based the famous Rep. of which we shall have to speak under 1824. The first prem. was awarded to Mr. Thos. Dixon, Stampmaster, Dunse; the second to Mr. Gavin Burns, Surveyor, Hamilton. (See 1821.)

In this year (1820) there was founded what was to be regarded as a superior class of F. So.—wherein the rates of payment by the members were intended to be sufficient to render the asso. self-sustaining. These rates were calculated by Mr. W. Morgan and Mr. Frend; and the engagements of the asso. were also guaranteed by the adjunct of a subs. cap. of £50,000. This was the *General Benefit Ins. Co.*, of which the Duke of Gloucester was Patron; the Duke of Bedford, President; and a number of other well-known gentlemen were trustees and directors. We give a further account of the asso. under date 1825.

London Unity of Odd Fellows.—We have here to speak of the *London Unity of Odd Fellows*, and it is prob. that this really takes precedence of all the numerous Orders of that extended body. But in its origin, as we have already intimated in our account of the *Manchester Unity* (1810), it was almost entirely convivial, and all that it did in the way of personal relief prob. took an eleemosynary form. In 1820 a Gen. Sec. was appointed; but we do not know how far its proceedings at that date took the shape of a F. So. as usually understood.

In 1842 T. of contributions and benefits were drawn up; and in 1845 lodges were required to have a sick fund as a condition of remaining in the Unity.

The gen. meetings of the Order have only been held once in 7 years; but henceforward they are to be held once in three years. The representation in the Conference is in proportion to numbers. The Executive Council sits in Lond. and generally controls the branches. They are the final Court of Appeal for disputes. Improvements are being introduced.

At the end of 1871 the Order had 6985 members, in 137 Lodges and 26 Districts—giving an average of 51 members to a Lodge. They were distributed as follows: 4 Districts, 65 Lodges, and 2477 members in *London*; in *Brighton* 14 Lodges, 941 members; in *Derby* 12 Lodges, 805 members. The rest scattered. The funds average about £2 p. member.

1821.—Mr. Gavin Burns, "Ordned Surveyor," Hamilton, pub. *An Inquiry into the Principles and Management of F. Sos. in Scotland, written with a View to Promote their further Extension and Improvement. Dedicated by Permission to the Highland Society of Scotland.* The author says in his preface:

Twenty years' practical experience in the management of several F. Sos. has afforded the writer of the following inquiry opportunities peculiarly favourable for studying the principles on which the success of such inst. depend; and as nothing has hitherto been pub. in Scotland on this subject, it is hoped that this attempt to introduce it to the attention of the public will not be unacceptable to those who are desirous to promote the interests, or encourage the estab. of such inst., or whose attention may not hitherto have been directed to their nature and importance.

He tells us that in the town of Hamilton at that date there were "nearly 20 F. Sos. of various kinds;" and "although a considerable number of these have for several years past

been in a state of decay, yet, from a census taken from their respective records in 1816, it appeared, notwithstanding the disabilities they were labouring under, . . . that for the 3 years previous to that time they had jointly distributed to their sick and infirm members upwards of £300 ann., exclusive of 2 funds for widows."

The following paragraphs are historically important, and confirm in a marked manner the views we have already expressed:

The plan of F. Sos. in Scotland seems to have arisen from the regulation of trades in royal burghs. These corp., besides the privileges they enjoyed, and the laws by which they were regulated under the royal charter, appear at an early period to have appropriated a fund for the support of such members as might fall into indigence or distress. These funds were levied and disbursed under regulations known by the title of bye-laws. The great advantages arising to members in distress from these provisions were soon observed, and duly appreciated by other classes of the community who were not connected with any of these public bodies, but who, from this example, gradually entered into voluntary asso. for the same useful purpose.

That the first F. So. in this country took the plan of their regulations from the incorp. trades in the royal burghs, appears from this circumstance, that the earlier Sos. adopted, and many of them still retain, the title of some particular trade or handicraft: thus in almost every town we have *The Weavers So.; The Wrights So.; The Shoemakers So.*, etc., although very few of them have any connexion now with the trade from which they derive their names.

At their first estab., however, besides the principal object, namely, the relief of their sick members, they generally adopted some laws for the regulation of their respective trades; and none were admitted to membership but such as were either craftsmen, or some way connected in their bus. with the craft. But in process of time these regulations and restrictions were found of little avail, as the Sos. possessed no power to enforce them; and in some respects they were found detrimental to the interests of the So.: for as it could not be expected that any member would forego the private advantage he might expect to gain in his bus., merely for the sake of continuing a member of the So.; so, when any restriction came to trench (as he might think) on his private interest, his connexion with the So. was dissolved. The natural consequence of this was, that those regulations peculiar to the trades came gradually to be laid aside: and those only were retained that provided for their sick members; and these Sos. have now for the most part been thrown open for the admission of all persons, independently of occupations, provided they are in other respects eligible.

The following passages, too, have an historic interest from another aspect:

At the first estab. of these Sos., by far the greater part, if not the whole, partook in part of the nature of charitable inst., inasmuch as sickness or infirmity did not of themselves entitle to any benefit from the funds, *unless coupled with indigence*; and this assistance was distributed in whatever proportion the So. or its managers judged proper, according to the estimate they might form of the necessities of the applicants. Many F. Sos. still exist which are conducted on this principle, and these are usually known by the designation of Optional Sos. [In England, Benefit Sos.]

There is a second class of Sos. which have been estab. since these first, and which are distinguishable from them in this respect:—that as every member is bound to contribute equally to the general funds, so every member is considered alike entitled to a fixed weekly allowance, when sick, if he choose to apply for it. In inst. of this second class, however, *it is always tacitly understood that those members who may be in comparatively easy circumstances will decline applying to the So.'s fund*, although, by the regulations, they have a right to do so; and this is the more necessary, as the funds provided by this class of so. are by no means competent to meet the expenditure, if all the members were to avail themselves of their right of applying to the funds when sick.

There is still a third class of F. Sos. which have been more recently estab., in which the principle of an independent provision during sickness or infirmity is attempted to be carried to its full length. The principal point in which this third class differs from the second is that such liberal contribution is made towards the funds as is expected to insure the benefit to all the members without exception, independently of their circumstances.

Passing to the consideration of the financial soundness of F. Sos., he says:

It is with pleasure we here notice, that the Highland So. of Scot. has lately taken the subject of F. Sos. into consideration, with a view to ascertain what remedy can be adopted for the evils which have generally prevailed among them; and, with that liberal and patriotic spirit which has always distinguished the transactions of that highly respectable body, they have with this view offered prems. for information to be communicated regarding F. Sos. of Scot. . . . We cannot, of course, anticipate with any degree of certainty the results of this inquiry which has been so very judiciously instituted; but from the contrast exhibited in a few F. Sos. (of the longest standing that have come under our inspection) between the number of members and their respective proportions of sick and disabled, for an average of 3 years, we have reason to suppose that the proportion may run about 1 in 17 or thereby.

He points out the importance of having at the commencement of every So. a scale of payments sufficient to provide for the benefits proposed to be granted; and shows that where this has not been done the increasing disbursements consequent upon the increasing age of the members renders the contributions, after a time, much greater than they need have been had the contributions been adequate all through. The necessary accumulation of a fund in the early years of a so. had indeed usually led the members into the belief that the contributions were rather too large than too small. He says there had been attempts to estab. F. Sos. "upon a plan which excludes the accumulation of cap. altogether." These were designated *Penny Sos.*—from the circumstance of a penny p. week being collected from each for every sick member. Upon these he observes:

It is plain that this plan can only be temporary, and, by no means, can afford any security of support in old age: for after a So. of this description has existed for 30 years, or upwards, their disbursements, and the consequent demands on the members to meet them, will unavoidably become so high, from having no interest to assist, that young members will be discouraged from entering, and those already connected will be disposed to withdraw. To remedy this last evil it has been attempted in some places to *compel* the members of such Sos. to *continue* the necessary payments; but it is difficult to conceive how this can be accomplished, without involving the So. in continual disputes with such members as may be disposed to leave it. And although it were practicable to hold all the members by force who have once entered, still no expedient whatever can *compel* others to join, to fill up the vacancies that must unavoidably occur. In short, unless a sufficient inducement is held out by F. Sos. both for members to enter, and for those already connected to continue, and that from motives of self-protection, no institutions of this kind can continue to thrive. They are in their nature voluntary asso., and every attempt to shackle them by compulsory measures must end in their ruin.

He shows that the graduated plan of allowance to members existed at this date with the Scotch F. Sos. "Some Sos. have two separate rates of weekly allowance: one for bed-fast members, and another something lower, for such as may be convalescent and able to walk abroad. Others make a distinction of another kind: they have a fixed weekly allowance for the first 3 or 4 months of the member's illness, and if he continue longer than that period on the funds, it is reduced about a fourth part during the remainder of the time he may be indisposed. Besides the support thus provided for the sick and infirm, there are frequently some minor provisions made, such as a stated sum allowed for funeral expenses on the death of a member, and a small annuity to widows." In regard to this latter allowance he remarks:

A small annu. to widows has been erroneously supposed not to require any special provision in the ann. payment; and hence many sos. paying 4s. or 5s. yearly have, besides the support of their sick members, given the widows a claim on the funds for 20s. or upwards ann. during their widowity. Whereas it has been long estab. by the experience of those funds for widows that have been of longest standing in this country, . . . that for every £1 of annu. to widows, an ann. prem. of 4s. or thereby requires to be paid by each member. . . .

He says some Sos. had found considerable difficulty in regulating the privileges of such of their members as had entered the army or navy. It had been contended on the one hand that, as their situation there was more hazardous, and as their pay was continued, and medical attendance provided for them when they were sick, that therefore they ought not to be entitled to any benefit from the So.'s funds while they continued in the service. On the other hand, it was contended that, while their contributions were regularly paid, the So. by accepting them was bound to pay their allowance on proper proof of sickness, the same as in the case of other members residing at a distance. In order to obviate these differences, some Sos. had adopted a rule to the following effect:

That while any member is receiving pay in H.M.'s service he shall not be entitled to any benefit from the So.'s funds, nor shall any accounts [subscriptions] be exacted from him during the time he may remain in the service; but that upon his discharge he shall be re-admitted to all the privileges of the So., whatever age he may have arrived at, provided he make application for the same within 12 months from the date of his discharge, and be free from ailment, or disease, at the time of such application.

Finally, he adds:

The last 30 or 40 years may be said, with respect to the F. Sos. in Scotland, to have been *the age of experiment*. During that period they have tried at how small a prem. the diseases, accidents, and infirmities of life could be provided for: and the result has uniformly been that the prem. *would at an average require to be double what was at first calculated as necessary*. The experiment has cost many Sos. their existence. Others, by timely augmentations to their contributions, have struggled through, although under several disadvantages; and profiting by experience may still answer the important end of their estab.; while those that have been more recently formed have had opportunities afforded them, by the failure of others, of founding their schemes upon such improved plans as may be expected better to answer their expectations.

Altogether, this is one of the most important and valuable pamph. ever written in regard to F. Sos., and we have given it prominence in a corresponding degree.

This year (1821) Mr. Richard Playfair pub. *Observations on the Rise and Fall of Enrolled Benefit Sos., and the Danger of Mismanagement therein. Dedicated without Permission to the Secretaries of Benefit Sos.*

1822.—About this date Mr. Courtenay, then Sec. to the India Board of Control, introduced into Parl. a Bill in view of instituting an inquiry to ascertain the causes of the wide-spread failure of F. Sos., and to suggest remedies to prevent recurrence. His motives were misunderstood and misrepresented. In *England* many Sos., actuated by groundless alarms, dissolved themselves and divided their funds. In *Scotland* a similar alarm prevailed: meetings were held; a copy of the Bill was obtained; and similar dissolutions were only prevented by the discovery that the operations of the Bill were confined to Eng. Finally the measure was abandoned.

There was pub. at Newark (Notts): *The Constitution of Friendly Sos. upon Legal and Scientific Principles, exemplified by the Rules and Tables of Calculations adopted under the Advice and Approbation of Wm. Morgan, Esq., F.R.S., and William Friend, Esq., A.M., for the Government of the Friendly Inst. at Southwell, etc.* (See 1823.)

1823.—There was pub. in pamph. form, by the Rev. John Thomas Becher, M.A.: *The Constitution of Friendly Sos. upon Legal and Scientific Principles, exemplified by the Rules and T. of Calculations adopted under the Advice and Approbation of Wm. Morgan, Esq., F.R.S., and William Friend, Esq., M.A., for the Government of the Friendly Inst. at Southwell; together with Obs. on the Rise and Progress as well as on the Management and Mismanagement of Friendly Sos.* In this pub. there is much information which must have been of very considerable value at the time. The following interesting calculation is made: Assume the number of F. Sos. to be 12,678, and that each so. assembles 15 times in a year, including attendance at feasts and funerals, "which is a very moderate computation," the aggregate meetings held ann. at public-houses would be 190,170, and estimating the expense of each member on such occasions at only 6d., "we find that £347,039 a year is thus impropitiously spent in ale-houses by the laborious classes"! The author adds:

Should this pub. obtain a favourable circulation, I may prob. add an appendix containing detailed instructions for keeping the books of such estab.; as well as a collection of T. which I have calculated for determining with accuracy at any time the amount of the funds; and for resolving every question that seems likely to arise upon the several assurances granted by the *Southwell F. Institution*.

An ed. with such an appendix was pub. We speak of it under date 1829.

The *Southwell F. So.* here referred to, and to which much attention was afterwards drawn by reason of its being founded upon a scientific basis—really the scheme laid down by Dr. Price in 1789, subject to some adjustments—was founded in Feb. of this year.

Same year, the Rev. John Wilson Cunningham pub. (2nd ed.) *A Few Observations on Friendly Soss., and their Influence on Public Morals.*

Among other writers on the subject of F. Soss. about this period was Mr. Wm. Dick, jun., of Bathgate, and Mr. Alexander Borland, of Paisley; each of whom accomplished something by way of improving the Soss. in their respective districts.

1824.—The measures taken by the Highland So. in 1820 eventuated in the pub. this year of a most important work: *Report on F. or Benefit Soss., exhibiting the Law of Sickness, as deduced from returns by F. Soss. in different parts of SCOTLAND; to which are subjoined T. showing the Rates of Contribution necessary for the different Allowances, according to the Ages of the Members at Entry. Drawn up by a Committee of the Highland So. of Scot. and pub. by order of the So.* (Edin. 8vo. pp. 288.) From this Rep. we propose here to give certain passages illustrative of the hist. and position of F. Soss. at this date. Thus under "Imperfection of F. So. Schemes," the dependence of F. Soss. upon the progress of Life Ins. in view of obtaining correct data is pointed out:

Until Life Ins. schemes had attained practical accuracy, the health ins. scheme, dependent on the same principles, could not be matured. The improvement of the former paved the way, in so far, for that of the latter; but into the computation of the latter, there entered an add. element, viz. the rate of sickness among human beings; and this rate remained to be ascertained.

F. Soss. thus left to the guidance of conjecture, at their outset, were unavoidably exposed to error. Their schemes have very generally misgiven; but their experience lays the foundation of a more correct system, by affording data for computation which could not perhaps have been attained through any other medium. Their errors are matter of no reproach. The spirit is to be admired, which, revolting at the humiliation of depending upon charity, led their founders, seeking for the means of independent support in sickness and old age, to endeavour to attain the desired end, regardless of the dangers of miscarriage.

Under "Attempts to Improve Them," it is pointed out:

The reluctance to give publicity to their transactions—a feeling very generally diffused, though now somewhat on the wane—and which cannot be justly blamed how much soever its existence is to be regretted, has operated with F. Soss. to their own detriment. A knowledge of the rate of sickness among their members, as ascertained by their own experience, was necessary to the just computation of a F. So. scheme; but the information was withheld by the very persons most interested in affording it: who seemed not aware of the importance of ascertaining the fact on a broad basis, and not to understand that the information was desired with a view to aid their meritorious endeavours to provide for their own independent support.

Finally, under the head of "Inquiry," we reach the statement of what was actually accomplished on this occasion:

Although the prejudices against such an inquiry were shaken by the previous attempts which have been noticed, they were not eradicated: meetings of Soss. were held; it was resolved and declared by some that the inquiry was sacrilegious; by others that it must have a sinister object; and by a third class that no advantage could result from it. Several Soss., actuated by more enlightened views, intimated their desire to forward the inquiry, but stated that their books had not been kept in a proper manner to afford the results desired. This was a general objection, and it presented a great difficulty. After mature deliberation, the Committee of the Highland So. circulated an exemplification of a method by which, in the existing state of So. records, the results might be found, though certainly not without considerable labour; and through the industry and zeal of the members of F. Soss., the Committee are now in a condition to review the experience of upwards of 70 Soss., for periods of 3, 10, 20, 30, 40, or 50 years.

The inquiry was confined to the age and sickness of the members, and was not extended to *deaths*, simply "from reluctance to load returns otherwise sufficiently difficult." The Report, however, adds:

But information from F. Soss. on the mort. experienced among their members would have been of much value amidst the great diversity of results exhibited by the existing T. of Mort.: and also from the consideration that the general rate of mort. in the community at large, including persons of sound and unsound constitutions, though it were ascertained with perfect accuracy, cannot represent with entire precision its rate in Soss. whose laws debar admission to persons of unsound constitutions. And being now satisfied that a return of deaths, though not indispensable to the object in view, would have been very desirable, and as, upon retrospect, it has appeared of more easy accomplishment than was at the time anticipated, it is a subject of regret to the Committee that such a return was not required.

We are next told that the Committee purposely abstained from desiring returns of the funds possessed by F. Soss., "being unwilling to excite the jealousy which any inquiry into their pecuniary affairs so readily creates." The information desired was entirely confined to *time*—the ages of the members, and the number of weeks of sickness at each particular age. "This information, combined with T. of Mort. [drawn from other sources], afforded the means of calculating the sick allowance which a given contribution can afford." Finally, by way of explanation:

The appellation of "Highland So." seeming to denote a limitation of object, may convey to those unacquainted with Scotland an idea that the inquiry has been confined to the rate of sickness in the mountainous districts only. But it embraced Scot. in general, and gives the rate of sickness chiefly of the lowland and more densely peopled districts: these being more favourable than the mountainous and thinly peopled districts to the estab. of such inst., which chiefly abound in agricultural, commercial, and manufacturing counties.

Returns to the schedule issued by the Highland So. have been obtained from F. Soss. in 16 out of the 33 counties of Scotland.

The Rep. then proceeds to give the details of the rate of sickness deduced from the

returns obtained. These we do not intend entering upon here. They will be reviewed under FRIENDLY SOS., EXPERIENCE OF; and also under SICKNESS.

In regard to the T. furnished in the Rep., the Committee say:

It seems prob. that any T. merely exhibiting rates of contributions and allowances, however accurately constructed, will not of themselves carry conviction to the minds of members of F. Sos. The doctrine of annu., on which such T. depend, is not yet familiar in this country, either to the higher or the middling classes of the people. It would be unreasonable, then, to expect either that it should be familiar to the labouring classes, or that they should acquiesce readily in inductions, while unable to follow any one step of the process from which the induction was derived. Generally speaking, *it would introduce a new idea among the members of F. Sos., could a belief be implanted that the schemes of these inst. are in any degree susceptible of calculation.*

It seems reasonable to expect that, among existing Sos, at least, a correction of the errors of their schemes, where such exist, must chiefly be looked for from their own members, and will be most effectually promoted by diffusing amongst the members, in the simplest form in which the matter admits, the materials of thinking on the subject.

Then in regard to the improving constitution of F. Sos. it is remarked:

F. Sos. have only attained gradually to the condition of health ins. schemes. *In their origin they were charitable inst.; the amount of the fund regulated the extent of aid, and relief was afforded to such only as were deemed objects of charity. In process of time their character changed. It came to be estab. that all unable to work were entitled to demand as a debt the stipulated allowances estab. by the regulations. But still the confirmed operation of previous habits and views preventing the change from becoming absolute, gave a mixed character to their schemes. Thus their laws occasionally recognize as a merit the abstinence from claiming the stipulated allowances; while at the same time they specially debar the casting reproach on those who apply for and accept of aid. This mixed character seems gradually to have disappeared, and their more elevated character of ins. schemes is now generally estab. . . . The new principle thus intro. was a valuable improvement, but in consequence it was necessary to vary other parts of the scheme in accordance with this great change; and some time elapsed, as might be expected, before this became fully and generally perceived.*

The Committee consider that the numerous failures of F. Sos. may have been partly occasioned by improvement in their principle:

The disorder which has prevailed in the affairs of F. Sos. seems thus, in some degree, to have been the consequence of an improvement in the principle of their schemes, unaccompanied with the corresponding changes which that improvement required in their various parts. *It seems to follow that the records of F. Sos. cannot in all cases be held to exhibit the absolute quantity of sickness among their members, but only that part for which allowances have been demanded. And accordingly in Sos. where all entitled to claim have not been in use to do so, the persons reporting the returns of sickness have corrected them by suppositions, making an add. to the quantity of sick allowances actually paid, for that sickness for which it is supposed no allowance was demanded.*

The returns included in this Rep. had thus been corrected in this particular; a fact which Mr. Neison overlooked in his evidence before the Select Parl. Committee on F. Sos. in 1849. Finally, the Committee, after reviewing and criticizing many points in the then practice of F. Sos., say:

F. Sos. have much the character of life ins. cos. The latter ascertain periodically the general state of their affairs, estimating the value of their engagements, etc. A similar estimate by F. Sos. every year, or at least every 5 years, would be highly expedient. The life ins. cos. thus know the present value of the claims that may come against them; and when any of the persons insured are disposed to withdraw, these cos. are in use to purchase up their claims at a rate under the actual value, and this abatement forms part of the profit of the co. Were F. Sos. once estab. upon correct principles, and accustomed to ascertain periodically the value of the individual stock of their members, it might deserve consideration whether it would be expedient that the directors should have a discretionary power to purchase up, under some regulated abatement, the interest of members who are going abroad, or who have become permanently estab. at such a distance as renders inconvenient the maintenance of their accustomed relations with the So.

The payment of surrender values in F. Sos. is not yet generally adopted. The large Affiliated Sos., at least, get over the difficulty of the location of their members, by allowing the transference of members from one branch or lodge to another.

In regard to the number of F. Sos. which had been founded in Scotland, it is stated in another portion of the Rep. that in *Aberdeenshire* alone no less than 200 such sos. had had their rules confirmed by the Justices since 1793. And the subject of these numbers is again referred to in another connexion, thus:

When the immense number of such Sos. is considered, *the general uprightness of their management appears, so far as has been observed, to be highly exemplary.* The collecting and duly investing the funds is a duty in general very prudently executed; and great labour is gratuitously undertaken by the members in visiting their sick brethren, and conveying to them the allowances for their relief. *Miscalculation, not mismanagement, appears to have been the cause of their miscarriage.*

Dr. Henry Duncan, of Ruthwell, Dumfriesshire, so well known from his exertions in connexion with savings banks, in a communication to the Committee of the Highland So. (which is pub. in the preceding Rep.), points out in a very clear manner the essential differences between F. Sos. and savings banks, thus:

It must be sufficiently obvious that a labourer, or servant, or mechanic, cannot by the utmost exertions of his honest industry, accumulate any considerable sum in a bank for savings in a very short period of time; and that it is only by the unremitting labour and frugality of a series of years, that he can hope by this means to raise himself above the fear of want. If a depositor should fall sick before he has laid up a sufficient fund for his maintenance, all his deposits will, in a few weeks, or at the most in a few months, be exhausted, by the suspension of his earnings, and the expenses attending a sick-bed, and he will be thrown upon the world without a shilling. A Friendly So. operates in a different manner, and supplies the very desideratum which is here required. *It is in fact an ins. against incapacity for labour.* When a member of such an inst. falls sick, he immediately receives a weekly allowance, which enables him to subsist, if not comfortably, at least without having recourse to the parish; and should he have previously deposited any money in the bank for savings, even that

fund may prob. remain untouched. It appears, therefore, that the system which wisely proposes to assist the industrious class in providing for their own support, would be incomplete without calling in the aid of those inst., which in place of being rival and incompatible estab., stand in absolute need of mutual support and co-operation.

This year (1824) there was pub.: *Considerations on the Necessity of Appointing a Board of Commissioners for the Protection and Encouragement of Friendly Soc.* By an Actuary. Lond. 2nd ed. 8vo.

There was also pub.: *Some Suggestions for the Improvement of Benefit Clubs; founded on the Reasoning of a Petition presented by the late D. Ricardo, Esq., to the House of Commons for the Author; also Suggestions for a Modification of the Poor Laws: with Remarks on the Comparative Situation of the Landowner and the Fundholder; and on other Subjects.* Lond. 8vo.

There was this year founded the *Lond. Friendly Inst. of Mechanics and Artisans*, which also purported to be a F. So. of a superior class. Its rules were certified by Mr. W. Morgan and Mr. Friend. At the close of 1875 it had 2043 members and a fund of £20,130.

Mr. W. Fraser, of Edin., pub.: *Statement submitted for the Consideration of the So. of Journeymen Printers in Edin.*, wherein he lays it down as a principle, in the constitution of F. Sos., "that whatever be their regulations in other respects, a so. cannot be permanent unless the contributions of the individual members during life, one with another (regard being had to the accruing interest), be equal to the whole allowances derived by individual members during life, taking them also one with another." A great deal of practical information is also given.

Mr. James Cleghorn, "Accountant in Edinburgh," pub. in that city: *Thoughts on the Expediency of a General Provident Inst. for the Benefit of the Working Classes; with T. and Examples of Contributions and Allowances; and an Abstract of the Acts relating to F. Sos. and Savings Banks.* The idea of the author appears to have been to estab. an inst. after the plan and mode of working of the *General Benefit So.* (See 1820.)

The *Edinburgh Compositors So.* was founded this year as a F. So. estab. "upon the principles recommended by the Highland So." See F. SOS., MORT. AND SICKNESS EXPERIENCE OF, 1841.

In the art. "Benefit Sos." contained in the Supplement to the *Ency. Brit.* pub. before or about this date it was stated:

It is a great advantage of Benefit Clubs not to require much in the way of funds. If the calculations are correct, the outgoings within an average period will bal. the incomings; and all that is requisite in the way of fund is a small sum to meet accidental inequalities. When this, it is not much that is lost; if a small add. fund is subscribed by each member, or instead of this, if the allowances are suspended or only reduced, the So. is placed in its former situation.

It is certain that at the date this was written, the data on which correct calculations could be made did not exist; therefore a So. with a minimum scale of contributions (as subsequent investigations have shown) was always in close danger of being swept out of existence.

The Rep. of a Select Parl. Committee on the "Combination Laws" presented to Parl. this year contained the following resolution:

9. That the Committee regret to find from the evidence that Sos. legally enrolled as Benefit Sos. have been frequently made the cloak under which funds have been raised for the support of combinations and strikes, attended with acts of violence and intimidation; and without recommending any specific course, they wish to call the attention of the House to the frequent perversion of these inst. from their avowed and legitimate objects.

This was Trades Unionism in its incipient state, even thus early corrupting and perverting the pure channels of industrial frugality!

Order of Free Gardeners.—We do not know when this Order was first instituted. We cannot find any authentic trace of it until this year, when the *Free Gardeners So.* held at the Lennox Arms, Crossgate, Gt. Harwood, Lanc., was regis. This Order would have no difficulty in creating a pedigree. The first created man of our Biblical history was a "Free Gardener"—until he partook of the tree of knowledge; and there is a wide range between that period and this at which we now find them in business conclave. We suspect the real origin of the present Order is but a few years antecedent to the date here assigned to it,—if indeed this is not the very beginning.

There are indeed several Orders of "Gardeners," viz. the *Free Gardeners*; the *Ancient Free Gardeners*; (Grand) *United Order of Free Gardeners*; and *Shropshire United Order of Free Gardeners*. We understand there has been a recent fusion of No. 2 and No. 3 of these Orders. The Ancient F. G. had originated in a split from the main body, and were mainly limited to Leeds and the district. At the time of fusion they numbered 18 Lodges, and 1105 members.

The Rules of the *United Order of F. G.* were settled at a meeting of the Order held at Blackburn in 1855.

The Ann. Meeting is composed of delegates, in the ratio of 1 to every 200 members. Rule 9 of the Order provides: "Any general officer or deputy coming to the ann. meeting in a state of intoxication, or getting into that state during the time he ought to be on duty, shall be fined 5s. for every offence, and not be allowed to remain in the meeting

while he continues to be in that state." A regulation which it has been found necessary to enforce.

The Order publishes returns of the year's income of the Lodges from contributions and entrance fees, or as it is called "Making money." Many Lodges do not make returns, but those that did return in 1872 made an income of £31,551, and an expenditure for sickness and funerals of £26,718. This account appeared to take no notice of interest upon invested funds, or of cost of man.

In 1871 the Order had 29,708 members, in 529 Lodges, and 72 Districts—giving a fraction more than 56 members in a Lodge. At the conference in May, 1872, the number was stated at 33,136.

In 1873—after the amalgamation—the number of members stood at 30,813, in 546 Lodges. It appeared that in this year there were suspended for non-payment of contributions, 1923; expelled, 274; died, 462; and 615 left the Order, the cause not being particularized. There was still a gain in numbers of 1926,—therefore the total initiations must have been 5200. This may not, however, have been a fair average.

The greatest number of Lodges, 137, were in Lancashire, and the next largest, Yorkshire, 132. Northumberland and Durham rank next. Then Staffordshire and Cheshire. Bedfordshire is the most southern county having any Lodges (20), and Westmorland has the smallest number, viz. 2.

The Order has a benevolent fund, from which grants are made to Lodges which have become insolvent otherwise than by their own default.

1825.—A Select Parl. Committee was appointed "to consider the laws respecting F. Sos., and to report the same, with their obs. thereupon, to the House: and who were empowered to rep. the minutes of evidence taken before them." Thomas P. Courtenay, known to have taken a great interest in F. Sos., was Chairman. This Committee took the evidence of a great number of gentlemen interested in the subject: among these the Rev. John Thos. Becher, Mr. Geo. Glenny, Mr. Saml. Higham, Mr. John Finlaison, Mr. Joshua Milne, Mr. Charles Oliphant, Mr. Wm. Friend, Dr. Augustus Bozzi Granville, Mr. Daniel Quarrier, M.D., etc., etc.

The Rep. of this Committee was ordered to be printed the same year; and from it we draw the following:

The first and chief defect in the law, as intended for the protection of the people, was the want of sufficient severity against error, in the orig. constitution of Sos. The rules of every So. were to be sanctioned by the Justices at Q. Sessions, who had the power of rejecting such as should appear to be not conformable to the true intent of the Act of 1793. Every So. which professed to provide for sickness or old age, and declared no unlawful purpose, was necessarily admitted. An examination of the adequacy of the means by which the professed objects were to be accomplished, was not declared by the Act to be, and certainly did not become in practice, a part of the duty of the Magistrates. It is believed that throughout the country the Justices acted ministerially, taking the word of the counsel employed to move for the regis. of the art., that nothing unlawful was contained in them. Indeed, except by reference to the T. of Dr. Price, which, though orig. calculated by desire of a Committee of this Ho. (in reference to a scheme of ins. for the poor—see *POOR*), had received no Parl. sanction, and had not been confirmed by experience—neither counsel nor Justices had the means of judging of the sufficiency of the payments required; and the T. did not extend to the cases of widows or children of deceased members, though these were cases contemplated by the law.

Another material defect was found, in the provision made against the fraudulent or inequitable disposition of the funds, or dissolution of the So. The Act required that no So. should be dissolved without the consent of a very great majority—not less than five-sixths of the existing members, and of the persons entitled to relief;—but this majority was *numerical* only, and it is obvious that the younger and more healthy members, whose expectation of resorting to the common fund was more remote, might in many cases outvote those who were in daily expect. of becoming superannuated, or were liable to occasional sickness. It is true that the consent of persons actually receiving, or entitled at the time to relief was required, in add. to the numerical majority; but if the moment for dissolving the club was chosen before any person had become entitled to a permanent allowance on account of old age, it might easily happen, that, without any infringement of the law, a club might be dissolved, really to the serious injury of those who had contributed for many years; but in truth sufficient care had not been taken to guard against an infraction of the law. A summary legal remedy was given to all persons aggrieved; still, it was a remedy by process of law, though the process was easy and inexpensive; and, at the best, it was remedy and not prevention. A Justice's order might be of little value to the injured person, after the money which it adjudged to him had been squandered.

But perhaps these causes of abuse and iniquity were less numerous than those in which ruin fell upon the old and infirm in consequence of the orig. error in computing the requisite contributions. This error necessarily became more apparent as time elapsed, because a yearly income might be adequate to support all the sick members of a club consisting, perhaps, of men all under 35 years of age, and to exhibit a great apparent surplus, and yet be totally insufficient, even with its accumulations, to maintain those of the body who survive to 65. Under such circumstances dissolution was the only measure to be taken. But to apportion to each individual the share of the remaining fund to which he was justly entitled required more of consideration and calculation than could be expected from every Justice of the Peace.

The orig. insufficiency of the fund was often aggravated by another circumstance, which led to other and great abuses. The clubs, which as well by the disposition of men, as by the provisions of the Act, were invited to meet in general assemblies, usually held their meetings in public-houses. Some of the clubs required an add. and limited contribution for the expenses of entertainment; but there is much reason to believe that encroachments also took place upon the common fund, and these were not likely to be checked if the sec. or the treasurer happened also to be the landlord of the house.

Another abuse of these Sos. has attracted much attention, and has been especially brought under the consideration of your Committee, by the reference of the reports of the Committee of last year, to whom it was referred to inquire "into the state of the law, and its effects so far as relates to the combination of workmen and others, to raise wages, or to regulate wages and hours of working." These clubs were in very many instances composed of persons working at the same trade; the habits and opportunities of association, which the F. Sos. gave to them, doubtless afforded facilities of com-

bination for raising wages and other purposes—all of which were then unlawful—connected with their common business. Your Committee will have to refer to this subject again, as connected with the *present* state of the law; they now mention it with the other defects and abuses of the old system, in order that the intention and effects of the existing Act of 1819 may be better understood.

The Rep. next proceeds to review the Savings Bank Acts, in relation to F. Sos., and hereon the following :

The Committee are not aware of any instance in which a savings bank and a F. So. have been united in one inst. They are of opinion that such a combination may be very useful, and that if any alteration is necessary in the law for that purpose, it ought to be made.

Referring to some of the Asso. then recently formed, and of which we have already furnished an outline, the Rep. says :

Your Committee are informed that some Sos. have been enrolled under the Act in which a provision is made for a certain or contingent benefit to the founders or shareholders of the inst. Your Committee have much doubt whether such Sos. are to be considered as "providing by contribution on the principle of *mut. ins.*" for the objects specified; and therefore *whether they can legally be enrolled under the Act.*

This looks rather like an attempt to kill, in their infancy, a class of sos. having the advantage of a guarantee of cap., which might at this date have imparted a much required solidity to the operations of F. Sos.

The Rep. next deals with the provision of sec. 2 of the Act of 1819 in regard to the option given to Justices to refuse to certify in case of a previous so. existing in any district for a like purpose with the new one proposed : and hereon it is remarked :

Your Committee are not aware whether any attention has been paid to this enactment ; but they are of opinion that a reference to it may often be useful, upon more than one ground. It is clear that a very small So. cannot be secure ; among a very few individuals, the law of average will not operate. What number of persons ought to combine, in order to form an average, it is not easy to state ; and there is a difference of opinion as to the lowest number that will be secure. *Your Committee think it desirable that no So. should consist of fewer than 200 members.* Where a proposition is made for estab. a new club in a town, village, or district, in which one already exists, and which appears to be incapable, from its pop., of supporting 2 clubs sufficiently numerous, the magistrates are perfectly justified in refusing, if they shall so think fit, to give to a second the special privileges of the Act.

The Rep. next reaches a point which has since become one of significance—viz, that of large societies :

It is a question for consideration, how far the preference of larger Sos. ought to be carried ; and whether magistrates ought to act upon it, when there is no ground of objection to the small one which it is proposed to estab. *Of late years inst. have been formed, intended to embrace all the inhabitants of a county or large district.* Such Sos. undoubtedly possess many advantages : the security is much greater by reason not only of the numbers, but of the superior responsibility of the trustees and officers, and the greater intelligence and accuracy with which the bus. is likely to be conducted. There is no possibility of using the So. for purposes of unlawful or dangerous combination. The medical attendance also will prob. be more liberally rewarded ; and if the concern is of sufficient magnitude to allow of an agent in every part of the district, there is perhaps no greater danger of imposition than when the So. consists entirely of neighbours acquainted with each other. Nevertheless it is certain that the people themselves are disinclined to substitute a subs. to these general inst. for their contributions to clubs managed by themselves ; they do not like to see the management in other hands than their own ; and they have an undefined apprehension of an invasion of their funds by the Gov. *It would doubtless be very desirable to remove these idle jealousies, and to encourage the people to accomplish their object in the more secure and certain method pointed out to them ;* but it may be doubted whether it would be either prudent or just to carry this attempt so far as to withhold the privileges of the law from any smaller asso., which appear to be constituted upon sound and safe principles, solely because there is a county inst., to which the contributors may resort. It is always to be apprehended, that the effect would be not to extend the larger inst., but to prevent the estab. of the smaller, or to occasion its being formed without the protection of the law.

See on this question the evidence offered to the Ho. of Lords Committee 1848, quoted at that date.

In regard to the clause of the Act of 1819 which required the T. of contributions in F. Sos. to be certified by "actuaries or persons skilled in calculation," the Rep. inquires :

Who are professional actuaries or persons skilled in calculation ? And in what way are the Justices to satisfy themselves that the persons by whom the T. are signed really answer to the description of skilful calculators ? Your Committee have called for a return from each county, of the names of all persons upon whose opinion any T. have been sanctioned ; and by an inspection of the names coupled with local information obtained from members of the Committee, your Committee are informed that in many counties the Bench have been satisfied with the signatures of petty schoolmasters and accountants, whose opinion upon the prob. of sickness, and the duration of life, is not to be depended upon. Your Committee will presently advert to several suggestions which have occurred to them for making more effectual the enactment in question ; but they desire now to call the attention of the House to the inquiries which they have pursued, with a view to the formation of accurate T. for the use of F. Sos. They are apprehensive that on an inspection of the evidence which they have collected, it may be thought that they have gone in some degree beyond their assigned functions ; but they hope that when the Ho. considers how naturally the several questions which depend upon human life and death flow one from the other, that they may be pardoned for not having stopped the witnesses who were before them, at the very point at which their evidence ceased to have an immediate and apparent bearing upon the subject of F. Sos. They feel assured that they have collected a mass of valuable information, upon subjects connected with the birth, health, life, and death of mankind ; and there is indeed hardly any point illustrated by this information, which may not become the object of a So. formed under the present law, seeing that the Act describes as the objects of these Sos. "the maintenance or assistance of the contributors thereto, their wives or children, in sickness, infancy, advanced age, widowhood, or any other natural state or contingency, whereof the occurrence is susceptible of calculation by way of average."

The Committee was justified in attributing value to the evidence collected. The critical examination to which the Mort T. then in use was subjected was certainly of the

greatest service in the cause of Life Ins., and almost from this date the *Northampton T.* stood condemned, as a delusive guide, in the minds of thoughtful men.

As to the data upon which the operations of F. Sos. had been based, the Committee say:

The more usual objects of the Sos. are, an allowance in case of sickness, a pension in old age, and the ins. of a sum of money at death. *It is remarkable that, until within a very few years, no data were collected whereon a calculation of the average occurrence of sickness at the several ages of man could be formed with tolerable accuracy;* but it is fortunate that a calculation made many years ago, upon a hypothetical assumption, has been found to lead to practical results, not very different from those of more recent inquiries.

The calculation here referred to was that embodied in Dr. Price's Hypothesis, which we have briefly stated under date 1789. The Highland So.'s T. (in the Rep. termed "the Scots T.") is referred to in the Rep., and disposed of as follows:

But the Committee certainly do not feel justified in recommending these Scots T., or any which require payments lower than those required at Southwell, for adoption by any So. in Eng. For sickness the Southwell T. may safely be adopted, provided that a separate and sufficient provision be made for sickness or disability occurring after the age of 65.

This latter point is followed out in some detail:

... They cannot but recommend to such members of the Ho. as may take part in the formation or man. of F. Sos. great caution in settling the rate of contributions for superannuated allowances; and they are not prepared to recommend in this case, as they have in sickness, the Southwell T. as a standard. *Perhaps the T. calculated by Mr. Finlaison [we speak of these later] are, for this contingency, the safest standard.* It will readily be perceived that too low a rate of subs. for allowances in old age is the most dangerous error into which a So. can fall. *The sufficiency of the contribution for sickness would in truth rather aggravate than palliate the mischief; because a So. consisting of persons of nearly the same age, which should have a rate adequate for sickness, and inadequate for old age, would continue to flourish until the members all became superannuated, when all would be ruined;* whereas the insufficiency of the rate for sickness would be obvious at a much earlier period, ... and a remedy might be applied before the evil had become extensive.

But against this view:

It has been alleged, in justification of the Southwell rate of superannuation, that as an ins. will be also made for sickness, the one contingency will bal. the other: *the man who attains the age of 65, and becomes a claimant for superannuation allowance, will probably have drawn but little on account of sickness.* It is obvious that this is only true if the amount of the two ins. bear a due proportion, one to the other.

On the question of superannuation allowances generally, the following important observations were offered:

A difference of opinion exists as to these superannuation allowances. In some inst. no allowance is granted by reason of old age only: an old man, if incapacitated by his infirmity for profitable labour, is in the situation of any other infirm person, and entitled to the reduced allowance given in sickness which has continued more than a year, or whatever may be the limited period. It has been justly observed, that this is an arrangement much more beneficial to the aged member, than one by which he is debarred from receiving a sick allowance, and only entitled to the very small pension which is sometimes given by way of superannuation: not more, in some instances, than 1s. or even 6d. weekly. *But your Committee are strongly impressed with an opinion of the desirableness of a superannuation allowance, adequate to the maintenance of the subscriber, without a resort to the parish.* It is true that the add. to be made to the monthly contribution, in order to secure this benefit, is considerable, and the remoteness of the benefit may disincline persons from subscribing for it, who are not unwilling to make a small sacrifice in order to be relieved under the nearer contingency of sickness; and a man's possible savings may be sufficient to allow of his providing for the one contingency, and not for the other. Yet as one main object of the inst. is to enable poor persons to maintain themselves through life, without recourse to the public fund [poor-rate], and to create a spirit of independence, every encouragement and facility ought assuredly to be given to persons who were willing to protect themselves against the necessity of either recurring, at the close of their lives, to the pauperism which they have avoided in the years of their labour, or being engaged in the struggle with the stewards of their club, which, while their incapacity for labour is in any degree doubtful, must continually harass and oppress them.

The next subject taken up by the Rep. is with respect to "the sanction of the actuaries" required by the Act of 1819. "Your Committee are decidedly of opinion that some alteration must be made:"

One mode which has suggested itself for securing the object contemplated in this part of the Act is the Parliamentary enactment of T. applicable to all the purposes of F. Sos. But even if the House were satisfied that the data exist for constructing such T. with sufficient certainty, it might be remarked, that this suggestion puts entirely out of the question all differences of locality or occupation.

But the rate of mort. and sickness in Eng. is not at present sufficiently well ascertained to justify a Parliamentary enactment of any particular set of T. Even the generally received opinion of the improvement in the value of life is rejected by certain observers of much eminence. And it must be owned that no extensive information has hitherto been collected as to the duration of human life among the lower orders; but it is obvious that neither experience, drawn from the higher and middling classes, nor results taken from the army or navy, or from the London hospitals, can be depended upon, in reference to the general mass of the manufacturing and agricultural pop. ...

Another suggestion is that the Justices of every county should name two or more persons, upon whose certificate only they will sanction the T. If it were certain that the Justices would be careful to name only actuaries of acknowledged ability and experience, without reference to provincial connexion, this suggestion might prudently be adopted. But your Committee are of opinion that the object might be more effectually accomplished by providing for a similar nomination by some authority not local, but extending over the whole of Eng.

It is remarkable to note that this latter is the plan adopted under the Act of 1870—thus after lying dormant nearly half a century, the idea has come into practical use!

The Rep. wisely recommends that "all the Laws relating to F. Sos. be consolidated into one Act."

The Committee had to close its labours before the subject remitted to it had been by any means exhausted; and hence the following paragraph:

Your Committee the less regret that the necessity of closing their labours prevents them from pursuing this enquiry further: because they are disposed to believe that the evidence which they have annexed to their Report will induce the House to resume the inquiry in another Session, and to consider the propriety of collecting, by Parliamentary authority, such information as may place the disputed questions almost beyond controversy.

This suggestion was adopted to the extent that another Committee was appointed, but whether in 1826 or the following year does not appear clear. Its Rep. was not pub. until 1827, under which date it will be reviewed in detail:

Incidentally at least it was in the minds of various members of this Committee to ascertain the possibility of applying the principle of mut. ins. not only to the endowment of children at a future age, as 14 or 21; but to the maintenance of a prospective family. The following passage of the Rep. we think clearly points to this:

It is generally believed in France, as well as in Eng., that among the lower classes more children are born, but of those a smaller proportion reaches maturity. *The same number of persons might then be found at the same age, with the same number of children, though the fruitfulness of their marriages had been extremely different.* It is clear that if this fruitfulness were the point to ascertain by experience, the inquirer, who should satisfy himself with ascertaining the number of children existing, might be widely misled. In adverting to the fruitfulness of marriages, your Committee will incidentally observe that, although they have some valuable evidence as to the number of children resulting from marriages, to which any children are born, they have none as to the number of marriages which do or do not produce any children at all.

On this point see ENDOWMENT INS.; FAMILY INS.; FECUNDITY.

There was pub. by the Rev. John Becher, M.A.: *Observations upon the Rep. of the Select Committee of the H. of Commons on the Laws respecting F. Sos.*

This year there was enacted 6 Geo. IV. c. 74—*An Act relating to Infants, Idiots, Lunatics, and Trustees of Unsound Mind.* The operation of which was directed (by sec. 11) to extend to Charity and F. Sos.

The *General Benefit Ins. Co.* (1820), which, as we have already shown, was really a F. So. of a superior class, this year announced the add. of *Female Ins.* to the gen. bus. of the office, and offered the following obs. thereon:

The immediate subject of female ins. has occupied the attention of the directors a very considerable length of time. In its investigation infinite labour has been bestowed, and in computing the T. of prem., recourse has been had to the opinions of the most eminent members of the medical profession; to the regis. of public inst. for the reception of lying-in patients; and to every species of statistical information bearing upon the subject. From these data the present T. have been computed. The prem. required are such as are necessary to secure the stability of the inst., and at the same time do not exceed the value of the provisions insured.

The want of correct T. of this description, and the impossibility of obtaining them by any means other than those resorted to in this instance, has been the cause why female benefit sos. are in a considerably worse and more disreputable situation than those of males; at this point of depression the subject is taken up by this Co. in the confident expectation of success. For if the female in the estab. of Sos. has not been considered of as much importance as the other sex, it cannot be because they are less entitled to the exertions of the best hearts and wisest heads. They are equally liable to the casualty of sickness, to the infirmity of age; and have particular claim to provisions at childbirth. To place within the reach of females of the manufacturing and labouring classes and others such provisions when these casualties and events shall happen, are the objects sought to be accomplished.

It may be necessary to point out some features of peculiar interest in the plan now submitted. They have been introduced for the purpose of rendering the system of female ins. as perfect and advantageous as present experience admits. *It has never hitherto been attempted to give fixed allowances at the birth of children upon an equitable rate of prem.;* all Sos. where such provisions have been given, have raised them by extra contributions, thereby rendering the demands uncertain, and increasing the direct payments frequently beyond the ability of the members. Other Sos. have withheld all allowances at the period of childbirth, when it must be admitted they are most needed. It will appear evident that these objections are here completely obviated, and that considerable attention has been devoted to a point of infinite importance to every female, to every husband, and to every father.

The absolute weekly allowance after the age of 65, combined with a cessation of payments, is also well worthy the attention of a large proportion of females—particularly servants of all classes; and the rule securing to those who may not have been claimants upon the sick fund, the allowance in old age at 61, in lieu of 65, will no doubt be appreciated, as proving the disposition to afford every advantage consistent with the security of the inst. and the interests of the assured.

We now reach the rates of prem.

1. *Prem. payable by healthy married females for ins. of 8s. per week during sickness; £3 3s. at every lying-in; and 2s. per week after having attained their 65th year.* If under 25, p. month 3s. 10½d.; under 30, 4s. 0½d.; 35, 4s. 1½d.; 40, 4s. 5d.; 45, 4s. 7½d.

3. *Prem. payable by healthy unmarried females for the ins. of 8s. p. week during sickness; and 2s. p. week after having attained their 65th year.* If under 25, p. month 2s. 0½d.; under 30, 2s. 2½d.; 35, 2s. 6½d.; 40, 2s. 11½d.; 45, 3s. 5½d.

5. *Prem. required by healthy female lives to insure fixed sums at death, ranging from £5 up to £50.* If under 25, monthly prem. for £5, 6d.; for £20, 1s. 1½d.; for £50, 2s. 4½d. If under 33, for corresponding sums monthly prem. 6½d.; 1s. 3½d.; 2s. 9½d. The other divisions of age were 41, 47, 51, 53 and 55; the prem. gradually increasing at each division.

The annu. rates were the same for females as males, viz. for each £100 sunk at age 50, £8 1s.; at 55, £8 19s. 6d.; at 60, £10 1s.; at 65, £11 9s.

The prosp. contained the following note:

The insured are requested to notice that there are no fines or extra contributions of any description

required beyond the net monthly premiums; neither are they required to serve any offices—inconveniences to which members of Benefit Clubs are subject to a very great degree; and although the payments may appear at first view higher than those required by clubs, yet when the nature and amount of the provisions are considered: that no add. payments can be demanded; and that perfect security is afforded for the fulfilment of the engagements of the Co., it will be evident that the assured possess advantages superior to those hitherto offered by any inst. professing similar objects.

Under the "Rules and Regulations" are several requiring notice:

3. At the expiration of 6 cal. months from the first Wednesday in the month of admission, and on payment of the 7th monthly prem., every person insured against sickness, and on life, shall become free, and entitled to the allowances during sickness as specified in the 6th and 7th rules; and for that payable at her decease to her representatives, as specified in the 8th rule.

4. At the expiration of 10 calendar months from the date of admission, and on payment of the 10th monthly prem., every female having insured for an allowance at lying-in shall be entitled to claim the same as specified in the 9th rule.

5. Persons insuring for an allowance in sickness are entitled to full pay for 52 weeks, and to half-pay for 52 weeks, after which they can receive only quarter benefit for any sickness or accident during the remainder of life.

6. The said total allowance of 52 weeks' full, and 52 weeks' half-pay, shall be payable to sick claimants in the following proportions, that is to say, a female declaring on the sick fund shall be entitled to 13 weeks' full pay in succession; if her illness still continues, half pay shall be allowed for 13 weeks more; and after the expiration of the said 26 weeks of full and half-pay, quarter pay will only be allowed during the remainder of that illness.

7. No person shall be entitled to full pay on a second or any subsequent declaration on the sick fund, unless 6 calendar months shall have elapsed from the date of the declaration off; but such second or subsequent declaration shall be taken as a continuation of the previous sickness, and the sick allowance shall be paid thereon as regulated by the preceding rule.

9. The allowance at lying-in shall be paid in every case where a child or children shall be born alive, after 10 calendar months from the date of admission, upon application at the office within 48 hours, in one sum of £2 2s. or £3 3s., agreeably to the provision made by the assured, subject to the production of a certificate, signed by the accoucheur or midwife; which certificate shall, if required, be verified upon the oath of the party signing the same. But in all cases of still-born children, the assured shall only be entitled to claim upon the sick fund for a period not exceeding 4 weeks from the date of her delivery.

10. On any claims being made upon the lying-in fund, a certificate of marriage shall be produced, and no claims whatever on account of illegitimate children will be allowed, or for any sickness during or consequent upon the pregnancy of unmarried females.

11. Unmarried females who may have insured for an allowance in sickness must, on getting married, trans. their ins. to the T. for married females, upon the terms and conditions by which they are regulated.

13. No female having claimed and received the allowance provided at lying-in shall be entitled to any sick allowance till after the expiration of 6 weeks from the date of her delivery.

14. Every female insured who shall become permanently disabled by loss of or injury to her sight or limbs, or by apoplexy, paralysis, or otherwise, or who shall have been confined in a lunatic asylum, without recovery, during a period of 6 calendar months, shall be placed on quarter pay for the remainder of life.

15. In all cases of the insured having, from any causes set forth in the preceding rule, been placed permanently on the quarter sick pay, or who shall be in receipt of the same when they attain the age of 65, they shall not be entitled to the provision in old age in add. thereto, but shall continue to receive the said quarter sick pay during the remainder of their lives.

16. Those who have never claimed any payment from the sick fund shall be entitled to claim the allowance provided for old age, when they shall have attained the age of 65 in lieu of 65.

17. No person ins. for the sick and lying-in benefits of this inst. shall belong to or become a member of any other so, for the purpose of receiving allowances from both, under penalty of exclusion.

18. Females receiving the sick benefits of this inst. shall not follow any bus., occupation, or employment whatever, during such receipt; nor be at liberty to leave home without a certificate from the Co.'s surgeon in writing, stating that she can do so without injury to her health; and such certificate shall state the place where the sick person is going, and the time when she is to return, under penalty of exclusion.

19. No claim shall be allowed on the sick fund for sickness or accident brought on by intoxication, intemperance, or debauchery of any description.

22. In cases of imprisonment for debt, the insured are allowed 2s. p. week and no more *in sickness and in health*, until the party shall be entitled to apply for her discharge under the Insolvent Debtors Act; but in case of her being remanded for fraud or otherwise, she shall not be entitled to any allowance during the remainder of her imprisonment.

23. Any person insured who shall be committed to any of His Majesty's gaols for any felonious act, and being convicted thereof, shall forfeit for ever all claims on the funds of the inst.

24. Any person insured will upon going abroad beyond the limits of Gt. Brit. forfeit all claims to the benefits of this inst.; but on her return may, if in an unimpaired state of health, renew her ins. upon payment of all arrears.

25. Persons ins., on falling sick, or meeting with an accident, must send notice thereof immediately. Such notice delivered at the office before 3 o'clock will entitle the claimant to sick allowance for that day. A notice after that hour will commence on the following day.

28. The Co. shall, in such cases as may be deemed necessary, cause sick claimants under these rules to be visited by such female visitors as may be appointed for that purpose.

29. If, in the declaration signed at the time of effecting any one or more ins., any artful, false, or fraudulent representation, or any untrue statement of previous or present state of health, shall be made, or any material fact relating thereto withheld, the person signing the same and desiring to make assu. with the Co. shall be excluded, and all payments made to the Co. shall be forfeited.

It is clear from the foregoing that all essential points in the man. of F. Sos. were as fully understood at that date as now. The questions of the law of sickness and of mort. alone required further elucidation.

About this date was formed the *Royal Union Asso.*, which was not simply a F. So. in itself, but appeared mainly constituted in view of promoting the formation of other Sos. Its scheme set forth:

Whereas it appears from evidence taken before the Committee of the Ho. of Commons, etc., that wherever Benefit Sos. have been estab. upon sound principles, and conducted by experienced persons, the greatest benefits have resulted; but that most Sos. are founded upon erroneous principles, and conducted at public-houses; and that the whole of these inst. are capable of great improvement; and—

Whereas, it has been proposed to estab. an inst. under the patronage of the King, Royal Family, Clergy, and Nobility, whose plan shall embrace all the advantages possessed by Benefit Sos. and Provident Inst., for the purpose of securing to its members various benefits and advantages, for the encouragement of provident economy and industry among the working classes, and to promote the estab. of F. Sos. upon good principles, and the improvement of those already estab. throughout the kingdom; and—

Whereas, the plan proposed has been examined; and after due and mature consideration, and in conformity with the opinion of many experienced and distinguished characters, the following rules, regulations, conditions, T., and stipulations, have been approved as the fundamental and constitutional laws upon which this So. shall be founded and conducted.

There is nothing in the rules calling for any special attention. His Royal Highness the Duke of York was announced as Patron, while in the list of hon. members were quite a number of Dukes, Earls, Lords, Bishops, and Members of Parl., including the Duke of Wellington, the Marquis of Chandos, etc., etc. The Asso. claimed to have aided in forming some of the best constituted F. Sos. of that period. Its own ultimate fate we cannot trace. Mr. Geo. Glenny, Act., was, we believe, the founder of this Asso.

There were pub. in Lond. this year the following pamphls., we suspect from the pen of Mr. Geo. Glenny, Act.—1. *Instructions for the Estab. and Improvement of F. Sos.* 2. *Errors of Actuaries, as applicable to the T. of F. Sos.* 3. *Considerations on the Necessity of Appointing a Board of Commissioners for the Encouragement and Protection of F. Sos.* 4. *Rules and T. for the Use of B. Sos. in every Part of the U. K., with Obs. and Instructions; pub. under the Sanction of His Royal Highness the Duke of York, and nearly 100 Noblemen and Members of Parl., Patrons of the Royal Union Asso.*

No. 1 of these pamph. asserted that the T. then used by the Royal Union Asso. were "formed upon those of Dr. Price, corroborated by a most extensive inquiry into the actual rate of health and sickness, amongst nearly 200,000 members of sos. in different parts of the kingdom; and although that inst. intends to pub. more accurate T. within one or two years, yet those in use at present err, if at all, on the safe side, and are unquestionably the best."

There was pub. in Edin. by Mr. W. Fraser of that city: *Remarks on the Constitution and Errors of F. Sos.; with the Laws of the Edinburgh Compositors So. instituted June 3, 1824, and upon the Principles recommended by the Highland So. of Scotland; and an Abstract of the Acts of Parl. relative to F. Sos.* The writer says in his "Advertisement":

The following remarks and laws were orig. intended for the use of the members of *The Edinburgh Compositors So.* only; but as this is the first So. which has been instituted upon the principles recommended by the Highland So. of Scotland, several respectable individuals have requested that they might be submitted to the public. In compliance with this request, and as numerous applications have been made for copies, it has been resolved that a limited number should be pub.; and it will be gratifying should these remarks so far attract the attention of the members of F. Sos. as to lead them to perceive and remedy those errors which have hitherto proved the ruin of these useful institutions.

There was founded the *Edinburgh Goldsmiths Equitable So.*—a species of F. So., to be constructed on the plan recommended by the Highland So.; and the members of which were to consist entirely of goldsmiths, silversmiths, seal-engravers, silver-engravers, and lapidaries, not exceeding 64 years of age. Among its "fundamental rules" were the following:

2. The sole object of this So. shall be to afford sick and funeral allowances to its members; and no part of the funds shall be otherwise expended, unless in defraying the necessary expenses incurred in the management.

3. As this inst. disclaims everything that bears the name or appearance of *charity*, all the members shall be placed on an *equal footing*, and all shall be entitled and considered to demand as their *right* the stipulated allowances.

8. Each member shall contribute to both the sick and funeral funds; and his contribution shall be quarterly as well in sickness as in health, during the whole period of life, or so long as he may remain in the So.

16. In order to preserve the funds in such a state that they shall always be equal to meet the claims upon them, and to hold out a fair security to new entrants, they shall be balanced at the end of every 2nd year; and if any deficiency appear, to the extent of 1s. for each member, it shall be levied from all the members along with their next quarter's contribution.

17. Should a surplus fund at any time arise beyond what is stated in the T. of equivalents or individual stock, it shall not be appropriated to any purpose whatever, but shall be allowed to remain and accumulate, in order to provide for the increased demands of such of the members as may survive 70 years of age, as, from the peculiar circumstances of this So., no extra provision has been made beyond that age.

During this year there too was issued from Beith, in Ayrshire, N.B., a *Scheme for new F. Sos.* The writer says:

Experience has shown that F. Sos. hitherto instituted in this place have not been formed on those principles best calculated to ensure permanent utility; several of them have given way altogether, and those remaining are fast on the decline: in a few years hence the whole will have vanished entirely. This must be matter of deep regret, for all must be sensible of the great benefit those Sos. have yielded to the members, their families, and widows. It is obvious that the chief defect in these Sos. has been the want of an entry-money regulated according to the age of the entrant, or the want of a competent ann. supply [subs.]. Some of the Sos. had no ann. supply at all—while the entry-money to them all was the same, of whatever age the entrant might be.

We need not pursue the subject; the case here shown is but a type of that which prevailed almost through the entire country.

Mr. James Millar, "Lecturer on Life and Health Ins. Principles," pub. in Dundee: *The F. So. Guide; or, a Series of Letters, Conferences, and Essays, on the Formation and Improvement of Benefit or F. Sos., founded upon Experience, and upon Principles calculated*

to insure the Permanency of these valuable Inst. The work was dedicated to the Highland So. It consists of a series of 11 parts, with an index, and contains some valuable information and advice. It contained a suggestion for the formation of "Congregational F. Sos. and Savings Banks."

The Highland So. of Scotland, by way of securing another step in the improvement of the conduct of F. Sos., offered this year prems. for the purpose of introducing a better knowledge of (1) farm, and (2) F. So. book-keeping, "and of leading to their more general understanding and adoption in practice in Scot." The prize under the 2nd head was "to the schoolmaster, whether parochial or otherwise, who shall present the best and most approved specimen of book-keeping for a F. So., exhibiting the whole transactions of the So. for one or more years, and a bal.-sheet of its affairs, at the conclusion of the year or period, carried forward, showing how far it is or is not capable of fulfilling its engagements to the members; and in particular exhibiting the age of each member yearly, the age at death, and the age of each member at the period of receiving sick-money. A piece of plate of £10 value, or that sum in money; and to his scholar in that branch, reported to be the most meritorious, as after mentioned, the Society's silver medal. The award was to be made in 1827.

Order of Mechanics.—When this Order was founded we cannot determine with any precision. We find that there was a *Mechanics National So.* in operation in Scot. this year (1825); and that this So. was founded in Leeds. We therefore assume the Order was in force at this date, and locate it chronologically, accordingly.

In 1870 the Order numbered 9624 members, in 145 Lodges and 12 Districts—giving nearly 67 to a Lodge. Many of the Lodges were not regis. In Lancashire there were 6 Districts, with 71 Lodges, and 3540 members; in Cumberland 3 Districts, with 31 Lodges, and 3082 members; in Northumberland 1 District, with 36 Lodges, and 2141 members; and in Westmorland 1 District, 3 Lodges, and 115 members. The accumulated funds at this date were £24,504. The funeral payments appear to be made by a general levy over the whole Order.

In this year, too, was founded one of the largest of the existing County Sos.—the Hampshire F. So. It was understood that the scheme had received careful consideration at the beginning, and that the So. has been carefully managed since.

This was one of the Sos. uniting to form the "F. Sos. Asso." in 1863.

In 1868 the So. adopted a *Deposit Branch*, which has worked in an exceedingly satisfactory manner.

The number of members in the So. in 1871 was 5347 benefit (including 199 deposit members), and 526 honorary.

At the close of 1872 the number of members was said to be 7239; and the accumulated funds £53,730—or £7 1s. 6d. p. member.

1826.—Mr. James Mitchell, LL.D., F.A.S., etc., read before the Mathematical So. of Lond. a paper, which was afterwards pub. as *A Treatise on Benefit or F. Sos., containing a Statement of Laws respecting these Inst.; the Prob. of Sickness, Mort., Births, and other Casualties; with Practical Instructions for the Formation of Rates, the Investment of the Funds; and their General Management.* The pamph. contains much that was of real value at the time it appeared; and, above all, it sought to make it clear that "the true principle of a F. So. is, that it is an ins. against certain risks; and every individual member ought to contribute his adequate and fair proportion, and no more, for all such risks as he chooses to ins. against, and for no other risks." (See 1828.)

There appeared in the *Monthly Mag.* (new series): "Remarks on F. Sos. by N. O.," May and June.

There was pub. at Newark, by the Rev. John Thomas Becher, M.A.: *Obs. upon the Rep. of the Select Committee of the House of Commons on the Laws respecting Friendly Sos.; Exemplifying and Vindicating the Principles of Life Assu. adopted in Calculating the Southwell Tables; together with the Heads of a Bill for Improving the Constitution and Man. of F. Sos.* This pamph., as will be seen, led to some controversy.

Mr. Geo. Glenny, Act., who had given evidence before the Select Parl. Committee in 1825, and who designates himself "Author of the Improved System of Mutual Assu. for Friendly Institutions," pub. a pamph.: *A Defence of the T. and Evidence of the Author and other Witnesses examined by the Select Committee on the Laws relating to F. Sos., against an Attack contained in a Pamph. recently pub., entitled "Obs. on the Rep.," etc.; together with Obs. on the Erroneous Method adopted by Messrs. Morgan, Friend, and Becher, in computing the T. of Prems. for the Benefit Club at Southwell.* The author of this pamph. (which passed into a 2nd ed.) appears to us to have had by far the best of the fight. In a very gentlemanly manner he demolishes Mr. Becher's charge of plagiarism; and shows that Mr. Morgan could not with candour support the Northampton T. as applicable to the annu. operations of F. Sos.

Ancient Shepherds.—When the *Order of Ancient Shepherds* really dates from we cannot determine. We find the *Loyal Order of Ancient Shepherds, Ashton Unity*, began to hold ann. meetings as early as 1826; and at this date therefore we locate them for the purpose of our outline.

There seem to be in all 4 Orders of Shepherds, viz. an Ancient Order, before the *Ashton* Unity, but prob. now united with the *Ashton* Unity; then the *Independent Order of Royal Shepherds*; and finally the *Wisebeach* Unity. We here speak mainly of the *Ashton* Unity.

Towards the close of 1873 the Order claimed to have about 46,000 members. The returns from the Lodges to the Head Office, which is at *Ashton-under-Lyne*—Mr. James Farron being Gen. Sec.—appear to have been made very irregularly; and the statistical details are accordingly very meagre. An instruction has been issued to the Lodges that they are to keep the sickness and the management funds entirely distinct. This, however, has only been partially observed. Many of the Lodge secretaries, particularly in the mining districts, are men of small education; and the correspondence with the head office on all points is exceedingly irregular. The Board of Management is elected at the ann. meeting from the whole Order.

The Chief Shepherd of the Order, in opening the proceedings of the Gen. Meeting at *Lincoln*, in 1871, said frankly:

"If we would make an impression upon those around us, we must be prepared with the fullest information as to our numbers, our liabilities, or calls that may be made upon us; and for our own benefit especially we need this information: for before we can engage to meet our sickness and mort., and fix our payments, we must know our liabilities, and acting upon this and the experience of similar Soss., we shall soon be able to fix our payments—not because a certain [other] So. may be offering large inducements for small payments. We must not at once try as it were to undersell or outbid them; but carefully analyse their offers, and, where needful, expose their follies. Again, if success is to follow us, we must have one universal system of dealing and action; not that we must all do one thing as regards payment of sick or death claims; but the principle should be the same throughout the Order—certain contributions for the same benefits—the only difference being between manufacturing and agricultural districts. . . . I now come to what should be the most complete part of my rep. (but like my predecessors I have to regret it is not the case), namely, the number of members, the increase, income, expenses, sickness and death, and the worth [finances?] of the Head of the Order, and also the Lodges. Now out of 88 Districts, only 46 have sent in their financial returns. Brethren, this should not be. Of course they will have to be fined, . . . but fines will not assist us in getting the information required, and they have a tendency to cause angry feeling; nevertheless I feel it to be my duty to carry out the resolution of the last A. M. C.

This plain honest speech shows how much has yet to be done to place this Order upon a proper business footing. But at this same meeting the proposal to introduce a scale of contributions graduated according to age was voted down by an overwhelming majority.

At the Ann. Conference at *Whalley Bridge*, in May, 1872, it was stated that the Order numbered 89 Districts, 1539 Lodges, and 45,517 members; with funds about £70,000. The ann. income of the Order is about £45,000. Its payments for sick relief and burials amount to between £30,000 and £40,000. In add. there is a Widows and Orphans Fund, to which some 13,000 members contribute. The bulk of the Lodges are in *Lancashire*, next follows *Yorkshire*; and then *Gloucestershire* and *Cheshire*. The *Wisebeach* Unity has many Lodges in the Eastern Counties.

The sooner this Order places itself under the protection of regis., and conducts its affairs upon a proper bus. footing, the better for all concerned.

The connexion between this Order and the *Foresters* will be explained in our notice of that Order under date 1834.

There was founded this year: *The Friendly Inst. at Worcester, for the County and City of Worcester*. It was established for the purpose of assuring support in sickness, infancy, and advanced age to provident industrious males or females. In the course of 1860 considerable doubts existed in the minds of some of the Trustees as to the solvency of this So.; and the proper application was made to the Registrar under 23 & 24 Vict. c. 58, s. 1. The number of members, male and female, at the time of the application, was nearly 900, and the amount of their fund about £11,000. Upon a thorough investigation by the Registrar, with the assistance of an experienced actuary, it appeared that it would be most beneficial to the interests of the members that the So. should be dissolved, and the funds equitably divided among them. The dissolution was declared in Jan. 1861, and about 3 months afterwards the money was divided. *The insolvency of this So. arose from the fact of males and females being admitted at the same rate of contribution for sickness and annu.,* "when (says Mr. Tidd Pratt) it is well known that the sickness experience in Female Clubs is considerably more than in Male Clubs; and the ann. payments towards deferred annu. are much greater for females," and in this So. the number of female members exceeded that of males. In add. to which the contributions for all the benefits were kept in one account both for males and females, and not divided with respect to the benefits subscribed for.—*Vide Rep. for 1861.*

Mr. Edward Allison, Surgeon, pub. in Edin. a pamph.: *Obs. on the Expediency of Instituting a Friendly Asso. of the Medical Profession throughout Scotland, for Insuring a Provision during Sickness and Old Age, Widows' Annu., Endow. to Children, etc.*; wherein he sought to show that the F. Soss. Acts were applicable to such a purpose. The author says:

It has not been deemed expedient, in Scotland at least, to estab. a fund upon the principle of F. Soss. for the better classes of the community. On what just grounds this has never been attempted I am at a loss to conjecture; although there is every reason to believe that prejudice has mainly contributed to it, and to dread that it may, for a considerable period, still exert its paralyzing effect to prevent the adoption of more correct and enlightened views upon the subject; but such a scheme appears to me perfectly legitimate and practicable. . . .

In the same or the following year *The Medical Provident Inst. of Scot.* was founded, but not under the F. Sos. Acts.

1827.—This year another Select Parl. Committee was appointed to “consider the Laws respecting F. Sos., and to report upon the same, with their observations and opinions thereupon, together with the minutes of evidence taken before them, to the House;” and to whom was referred the Rep. of 5 July, 1825—already fully reviewed. This Committee made its Rep. during the same year; and this document we shall proceed to notice. Mr. Courtenay was again Chairman of the Committee, and among the witnesses examined were Rev. John T. Becher, Mr. Joshua Milne, Mr. Francis Baily, Mr. Charles Babbage, Mr. Benjamin Gompertz, Mr. John Naylor, Mr. Griffith Davies, Mr. John Diggles Bailey, Mr. William Morgan, Mr. John Pensam, Mr. John Finlaison, and Dr. A. B. Granville.

The Rep., after pointing out that the benefits usually offered by F. Sos. consisted (1) of allowances during sickness, (2) of allowances in old age, (3) a sum to be received at death, and (4) occasionally endowments for children, proceeds to review the data available in regard to each of these classes of benefits:

On the 1st and 3rd of the contingencies mentioned, sickness and death, your Committee have nothing to add to the Rep. of 1825. An opinion was therein expressed that “for sickness the *Southwell T.* may safely be adopted, provided that a separate and sufficient provision be made for sickness or disability occurring after the age of 65.” This opinion was not founded upon any very accurate or very extensive data, for in fact none such have been collected for Eng.; nevertheless, as these sickness T. have not been impugned by any person of authority; as they are grounded upon an estimate of sickness considerably higher than that which results from the inquiries of the Highland So. of Scot.; as they are in a considerable degree supported by experience, and their insufficiency, if they be insufficient, will appear at no distant period, your Committee do not hesitate in adopting the opinion of the former Committee in favour of the *Southwell T.*, or rather of the improvement of *those T. which has been introduced, as will be presently seen, by Mr. Becher.*

They desire, however, that particular attention may be paid to the condition required as to sickness occurring after the age of superannuation. They do not consider the sickness payments are sufficient to provide for the diseases of old age: it is necessary, therefore, not only that each member of a So. should ensure for a superannuation allowance, but that such allowance should be sufficient to maintain him in sickness. *It would perhaps be, on these grounds, more convenient that the age of superannuation should be fixed at 70.*

The Committee also expressed an opinion, in which your Committee concur, that the *Southwell* rates for payment on death, being founded on the *Northampton T.*, might be adopted with perfect safety. *If, indeed, ample provision were made for the other contingencies, there might be, for reasons which will presently appear, a reduction of those rates.*

The Rep. proceeds to state that the attention of the Committee had been directed principally to the “superannuation allowances.” The Committee of 1825 had not recommended the *Southwell T.* as a standard. These rates being founded on the *Northampton T.*, this Committee had thought it incumbent upon them to consider more particularly than the former Committee the hist. and sufficiency of those T. With this view they had “examined Mr. Becher, the founder of the *Southwell So.*, and Mr. Morgan, who always uses the *Northampton T.*; both these gentlemen were known to be favourable to these T. They examined also Mr. Finlaison, whose opinion, unfavourable to these T., was stated in 1825; and Mr. Milne, Mr. Francis Baily, Mr. Gompertz, Mr. Griffith Davies, Mr. Babbage—all eminent mathematicians—and several other persons, who, as well as these gentlemen, are known to have paid attention to questions connected with the duration of human life. *Of these gentlemen, no one, except Messrs. Becher and Morgan, recommends the Northampton T. as a safe basis for a deferred annu.* . . . For all that can be said in favour of the *Northampton T.* your Committee refer to the evidence of Mr. Becher and Mr. Morgan, with whom they believe Mr. Friend concurs.”

This second blow at the *Northampton T.* gave it its *quietus*. That of 1825 had undermined it considerably. The Committee, after reviewing in some detail the several Mort. T. then known, in reference to a basis for the superannuation allowance, proceed:

Upon the whole, your Committee are of opinion that the *Carlisle T.* may prudently be adopted for general purposes, including that now in view—the valuation of an allowance in old age. Mr. Finlaison’s, which are the most recent of all the T., would in all cases give a higher expect. of life, and consequently require a larger payment from the members of a F. So.; but the objection arising from selection does apply, in a considerable degree, to these T.; and Mr. Finlaison himself bears testimony to the sufficiency of the *Carlisle T.*

The Committee then proceeded to examine the merits of a T. here designated the *Dorsetshire T.* (of sickness): being in fact, not a T. based upon any special experience, but a modification of the *Southwell T.*, which Mr. Becher had prepared, in the light of the investigations of the Committee of 1825; and which modified T. had been used for the purposes of the *Dorsetshire F. So.*, founded in 1826. The T. was graduated for ann. payments instead of quinquennially, which the Committee pronounce to be a decided improvement:

On the whole, then, your Committee are of opinion that the *Dorsetshire T.*, or Mr. Becher’s new T., having the ann. graduation, may safely be adopted, provided: 1. That a separate provision be made for the expenses of man. by fines, admission fees, voluntary contributions or otherwise. 2. That the proportion of females do not greatly exceed one-third of the whole number of members. 3. That the assu. for a superannuation allowance be always connected with a life assu. requiring a monthly payment of half its amount. 4. That the present rate of interest allowed on [Gov.] debentures be continued.

Having thus disposed of the technical questions—not satisfactorily, we think—the Rep. proceeds:

Your Committee are decidedly of opinion that the Sos. should be formed upon the largest scale possible. It is very difficult to fix a number of members below which no So. ought to exist; . . . if they were required to give an opinion upon this point, they would say that it would be imprudent to estab. a So. with fewer than 200 members.

It will be particularly desirable for the smaller Sos., indeed it might be expedient for all new Sos., to make 70 the age of superannuation; up to that age many men are very capable of maintaining themselves by work. The payment necessary for such an allowance, commencing at the age of 70, is little more than two-thirds of that which is required if the allowance commences at 65. But on the other hand, the sickness payment must be somewhat increased, if it is to provide for sickness occurring between 65 and 70. And if the superannuation be made perfectly safe, there will be no necessity to have recourse to a life assu. for supplying its deficiency. It is assuredly much better that the contribution for each contingency should be sufficient in itself; and though your Committee agree with that of 1825 in deeming it highly important, *with the view of avoiding pauperism*, that a superannuation allowance should always be provided, they do not think it absolutely necessary that a sum should be assured at death.

Your Committee cannot conclude their obs. upon this part of the subject without recommending to the House the adoption of measures for making an accurate and extensive collection of facts, whereby the solution of all questions depending upon the duration of human life, and the number of children born, may be facilitated.

The Committee was of opinion that the law requiring the T. used to be certified by two actuaries should be repealed. It was further considered that, where sets of rules and T. had once been certified, they might be used for other sos. without any fresh certification—a dangerous recommendation, in the light of the influence of location and occupation upon disease; a subject not so well understood then as now. The Committee was of opinion "that of all the suggestions which have been made for a substitute for this [the actuarial] mode of insuring accuracy, a reference to the National Debt Office is the best." Through this Office, too, it was recommended that all returns of the state of the Sos. should be demanded. It had been the intention of the Committee to secure the preparation of a Bill for consolidating and amending the laws of F. Sos.; but this portion of their labours had been abandoned.

In the Appendix to this Rep. was contained a number of valuable T. and documents which we shall deal with in their proper places.

Among the papers in Appendix B, contributed by Mr. Joshua Milne, is one wherein he remarks:

If every such [F.] So. be required to keep accurate regis. of all the events that occur among its members, whether of disease or mort., and the ages at which they occur; those regis. will, in no great number of years, become exceedingly interesting and instructive; and will afford the best data for determining the conditions on which the benefits of different kinds to be derived from such asso. can be secured to the members.

In another communication from this great authority [Appendix H 3]—speaking more particularly of "superannuation allowances"—he says:

But I am satisfied that no one T. or scale of contributions can with propriety be adopted by all F. Sos. Such a So. composed of members living in and near a manufacturing town, with a pop. exceeding 12 or 15 thousand persons, might, I think, safely adopt the rates of contribution I have given above (ranging from 5 to 15 p.c. higher than the *Dorsetshire Sickness T.*), with some add. for the expenses of man. But in places where the pop. is less dense, and especially where a considerable proportion of the members of the F. So. are chiefly employed in the open air,—as, for instance, in agricultural labour,—I think it prob. that these rates of contribution could not be safely depended upon without some more considerable augmentation, which I cannot pretend to estimate for want of data.

Here was a clear recognition of the influence of *Locality* and of *Occupation* on the duration of life.

There was also given in the Appendix, by Mr. John Fleming, a member of the Committee, "a T. showing how the int. accruing from deposits in a savings bank may be beneficially applied, in the county F. Sos., to the endowment of children; the assu. of a weekly allowance (with medical attendance) in sickness; an annu. after the age of 65; and a sum of money on death"—a most ingenious T., but too lengthy to be reproduced.

This year Sir John Tamlyn pub.: *A Digest of the Laws of F. Sos. and Savings Banks.*

In Feb. this year a meeting was held of presidents and treasurers of different F. Sos. in and about Edin. The chairman of the meeting declared it to be for the purpose of forming a So. of delegates from the different Sos., in view of "circulating among the various Sos. the best information on the subject of their common interests, particularly with a view to the amicable adjustment of disputes between them and their members; and to the adoption of such other measures as may tend to the improvement and permanency of their constitutions." This So. of delegates issued an address of a practical character to the other F. Sos. of Scotland, calling attention to many vital points in the constitution and man. of these So.

This Assn. consisted in the first instance of the delegates from 44 Sos., all belonging to Edin. and Leith, with some 3 or 4 exceptions, to which the names offer a guide. We give these names, as conveying an excellent idea of the nature of the Sos. existing in Scotland at this period. We take the short titles only: Tailors (founded 1715); Carnegie St.; Royal Arch; Cabinet and Chair Makers; New United F.; Water of Leith; Plasterers and others; Journeymen Plasterers; Mr. Trotter's Workmen; Royal Exchange; Edinburgh Operative Weavers; Crosscauseway Agreeable; Friendly Asso.

Relief; New Journeymen Hammermen; Journeymen Mason Lodge; Shoemakers, West Portsmouth; New Journeymen Shoemakers; Scottish Youths; Incorp. of Weavers, Water of Leith; Weavers and others, Water of Leith; Millers, Water of Leith; Caledonian Youths; Royal Midlothian Volunteer Artillery; Tanners and Curriers; Celtic Youths; Sir William Wallace Youths; Tradesmen and others, Water of Leith; Royal Highland Volunteers; Slaters and others; St. Paul's Lodge of Gardeners, at Forfar; Caledonian Munificent; Herriots; Journeymen Bakers; Edinburgh and Leith Marble Cutters; Edinburgh Compositors; Edinburgh Goldsmiths Equitable; Edinburgh Free Carpenters; Dalkeith Caledonian Juveniles; Dalkeith Youths; Skinners, Water of Leith; Journeymen Goldsmiths (founded 1767); Royal St. Crispin; Junior Journeymen Smiths (founded 1784); Journeymen Wrights and others; New Philanthropic. The number of members in these various Sos. numbered from 40 to 413, the lowest being the Operative Weavers; the highest the Dalkeith Youths.

In the following year the Asso. issued a Rep., which was of much interest at the time. During this year a T. was formed of various F. Sos. estab. for males in a portion of the parish of Sedgely (Staffordshire), containing 2000 families and 9000 people. There were 26 Sos., of which 24 held their meetings in public-houses. The average number of members in each club was 59. The average yearly contribution £1; the average weekly allowance in sickness 7s. The whole number of members was 1540. The add. sum which they were bound to contribute to spend in drink at their meetings was £770—or on an average 10s. for each member. Beyond which sum, it was estimated they prob. spent as much more at their yearly feasts, and in flags, music, etc. A later inquiry (1844) revealed the fact that most of these Sos. had passed into bankruptcy.—*Seymour*, 1844.

Mr. W. Fraser contributed to the *Edin. New Philosophical Journ.* a series of papers: *On the History and Constitution of Benefit or F. Sos.* These were afterwards published in pamphlet form. Mr. Fraser, taking the *Edin. Review* estimate of 1820, that one-eighth part of the pop. of England were members of F. Sos., finds this number to be 1,610,571; and proceeds: "As these Sos. pay sums upon the death both of members and their wives, and supposing only two-thirds of the members to be married, the number of members and their wives insured for this [the death] benefit will be 2,684,285 yearly. Taking their average age at 40 (40·3 being that of the male members of 79 Scotch Sos. above referred to) and their ann. mort. at 76 in 3635—which is that given by the *Northampton T.*—the number of deaths occurring yearly will be 56,123; the payments for which at the rate of £5 each will be £280,615 ann."

If the same rate of *Sickness* allowance as had been found to prevail in the Scotch F. Sos. were taken for all the Sos. of the Kingdom, the distribution would amount to £411,823. Add this to the Death sum—there is a total of £692,438 p.a. But as there are several other benefits granted by many F. Sos., such as Widows Annu., Allowances to Orphans, etc.—the total ann. payments may be estimated at nearly a million sterling!

Mr. W. Fraser, of Edin., pub.: *Case of the Forfeited Members of F. Sos.*, wherein he discusses the position of members who voluntarily relinquish membership in F. Sos., in relation to any return of their subs. or any part thereof.

1828.—There was enacted this year the 9 Geo. IV. c. 92—*An Act to Consolidate and Amend the Laws of Savings Banks*—which, after repealing the former Acts relating to these, enacted (*inter alia*) that the rules and regulations for these inst., before being deposited with the Clerk of the Peace, were to be submitted to a Barrister "to be appointed by the Commissioners for the Reduction of the National Debt," for the purpose of ascertaining whether the same were in conformity to law. The Commissioners, the same year, appointed Mr. John Tidd Pratt, of No. 4, Elm Court, Temple, for the purpose aforesaid—a name which for an entire generation afterwards became extensively known in connexion with F. Sos.—although he did not hold office directly under any of the Acts relating to these Sos. (See 1829.)

The *Royal Standard* F. So., founded this year, adopted the feature of granting *protection against fire* to its members for a sum not exceeding £15 each. From 1828 down to 1862 the claims upon its funds from this risk had amounted to £1320, averaging £6 12s. p. claim. In the year 1862 the So. had 4764 members; the amount at risk for fire ins. was therefore £71,460 at that date. Its claims during the year were 10 in number, amounting in all to £69 18s. 6d., averaging £6 19s. 10d. p. claim. Only 1 reached the full sum of £15. The ann. rate, charged in monthly payments, amounted to rather less than 3½d. This would yield a rate of just under 2s. for £100 insured. It will be remembered that the operations of these Sos. were relieved from all stamp duties; otherwise the scheme of fire ins. could not have been carried out in the economic manner here indicated.

At the close of 1872 the So. had 6331 sickness members, with an accumulated fund of £85,107. The expenses of man. were 10 p.c. (See 1841.)

The *Wiltshire* F. So. was founded this year, according to the then popular system of the Rev. J. T. Becher [see 1825], the whole management being carried on by the hon. members. This, however, was not deemed successful, and in 1840 the constitution was altered and there was introduced to the man. some of the benefit members. The So. has 101 branches, which in fact are separate parishes. The entire man. of each branch is

"supposed to be" under the immediate control of the Committee of that branch. The central body enforces on the branches adherence to the rules, and "in all exceptional or discretionary cases" exercises a gen. superintendence over the whole So. The ann. meeting elects the Central Committee—with the exception of the President, Trustees, and Auditors, who are members of the Committee *ex officio*. The branches hold ann. festivals, which are largely attended, and have, it is believed, been productive of good. The festivals are local and are paid for out of the district funds. Each branch manages according to its own funds or fancy. The only restriction is that they must not be held at a public-house. There is no restriction as to intoxicating drinks.

The benefits are for sickness, death, funeral, and an annu. at 65—the members subscribing to any or all of these as they desire. There is also a "Deposit" class. *There are quinquennial valuations*; and in this way the So. has had the benefit of the advice of various actuaries.

This is one of the Sos. which united in 1863 to form the F. Sos. Asso.

At the close of 1872 there were 5634 Sickness members, with a fund of £26,885 10s. 6d. —or £4 15s. 3d. p. head. There were also 1487 "Deposit" members, with a fund of £4699 11s. 7d.—making the nominal total of members 7121. The cost of man. (less medical officers' salaries), about 13½ p.c. on the contributions from S. and D. members.

The Rep. for 1872 spoke of a diminished rate of sickness "by 3 days"; and a smaller proportion of declarations on the funds.

At the close of 1875 the So. had an aggregate of 8275 members, with accumulated funds reaching £33,485.

Mr. Neison, in his *Contributions to F. Statis.* 1845, drew attention to the marked difference between the sickness experience of this So. and that of the *Essex Provident* So., which he thought was founded in the same year, but which was really founded 10 years earlier. "They resemble each other very much in respect to the rural character of the districts over which the two Sos. are distributed; but in the ratio of sickness experienced by them the difference is very great. Both Sos. were estab. in the same year, 1828; both Sos. are widely spread over districts almost purely agricultural; and both Sos. contain a large number of members." The annexed T. shows the rate of sickness experienced by the male members of each So. in weeks.

The 10 years difference in the age of the Sos. will at once account for much of the excess of sickness here shown; and we should hardly have given the T. except that it has almost become historical—it being again given in the 4th Rep. of F. Sos.

Commission, 1870—the discrepancy of age not being discovered until now.

This year there appeared in the *Westminster Review* a paper: *On the Diminution of Sickness and Mort., based upon Dr. Mitchell's Treatise pub. 1826.*

This year there was founded the *County of Kent F. So.* The Rev. J. Hodgson, its founder, in his evidence before the Select Parl. Committee on F. Sos. 1849, says it was located at Sittingbourne; but that its operations were [in 1849] extended to the whole County of Kent, with 3 centres of operation, viz. *Sittingbourne, Maidstone, and Ramsgate*. The So. had "within the last few years" insured a better class of people. "The Legislature has been kind enough to permit assuring up to £200 upon life, and we encourage all the Gentry and Clergy to assure for £200 upon life, which are very profitable assurances, and furnish considerable sums towards expenses of man." The rates adopted in the life branch were the same as those of the *Equitable Life*.

On the 15 May (1828) a meeting was held in Edin., the Lord Provost in the Chair, for the purpose of constituting a new Benefit So., "on a surer basis than any that at present exists," to be denominated *The Edin. School of Arts F. So.*; but to be open to all classes of the community. This So. was formed; and was regarded as a model alike in its constitution and rules, which other Sos. might with advantage follow. It embraced the three features of a sickness fund; an annu. fund; and a life ins. fund; for each of which properly constructed T. were employed. The rules and T. were prepared by Mr. John Lyon. Higher rates were charged to females for annu. than for males.

1829.—There was enacted 10 Geo. IV. c. 56—*An Act to Consolidate and Amend the Laws relating to F. Sos.*—which, after reciting, "Whereas it is expedient to amend the Laws relating to F. Sos., and to consolidate the same into one Act, and to make other provisions respecting F. Sos.," repeals all the former Acts as to these, reserving as lawful all that had been done under their authority. It then further recites:

II. And whereas certain F. Sos. have been estab. in *Gr. Brit. and Ireland* for raising by voluntary subs. of the members thereof separate funds for the mut. relief and maintenance of the said members in sickness, old age and infirmity; and it is expedient to give protection to such Sos. and the funds thereby estab., and to afford encouragement to other persons to form the like Sos.

Age.	Essex So.	Wilts So.	Difference p.c.
21 to 25	1'291	0'743	72'409
26 „ 30	1'346	1'071	25'677
31 „ 35	1'439	0'929	54'897
36 „ 40	1'534	0'743	106'461
41 „ 45	1'712	0'486	252'263
46 „ 50	1'821	0'600	203'500
51 „ 55	3'229	0'843	283'036
56 „ 60	4'869	0'771	531'518
61 „ 65	4'126	1'929	131'892
66 „ 70	15'969	2'285	598'652

Wherefore it is then enacted that any number of persons might form themselves into a So., and raise a fund for their mut. benefit, and make rules, etc.; with power to alter and amend rules (sec. 2). Sos. in their rules to declare the purpose of their estab. (3). *Rules to be submitted in first instance to the Barrister appointed to certify the rules of Savings Banks in Eng. [see 1828]; in Scotland to the Lord Advocate or any of his deputies; in Ireland to such Barrister as should be appointed for the purpose, and afterwards to be confirmed by Justices in Quarter Sessions and lodged with Clerk of the Peace. If the rules were certified by affidavit as being a copy of any other certified rules, then they need not be submitted to Barrister, etc. (4). Barrister might refuse to certify, and Justices in Q. Sessions might override such refusal, if satisfied with T. (5 & 6). No So. entitled to benefits of this Act unless their rules have been confirmed (7). But when entered and deposited, to be binding on members and depositors (8). No confirmed rules to be altered otherwise than at a general meeting of members (9). Then follow a number of regulations for appointment of officers, trustees, committees, etc. Surplus funds to be invested and proceeds brought into account (13). No fee payable for any proceedings regarding transfer of funds, etc., in any court (17). Priority as to repayment of funds in case of death (20). *Provisions as to payment of sums not exceeding £20 where members died intestate (24). Justices might hear cases of fraud and punish by fine and imprisonment (25). Proceedings as to dissolution of the So., and stock not divisible except for purposes of the So. Penalties for illegal dissolution (26). Rules to provide for settlement of disputes and appointment of arbitrators (27). Reference to Justices if rules so provided, orders of whom to be final (28-9). Funds might be invested in Savings Banks or in Bank of Eng. for Reduction of National Debt, carrying int. at 3d. p.c. p. diem (31). Minors might be members and have legal authority to act (32).**

Then by sec. 34 it is recited:

And whereas it is desirable for the better security of F. Sos. that correct calculations of T. of payments and allowances dependent on the duration of sickness and the prob. of human life may be constructed for their assistance: and whereas the present existing data on these subjects have been found imperfect and inefficient.

And it then enacts: That every such So. estab. or to be estab. under the authority of this Act should *within 3 months after the expiration of the month of Dec. 1835, and so again within 3 months after the expiration of every further period of 5 years, transmit to the Clerk of the Peace for the County wherein such So. was held a return of the rate of sickness and mort. experienced by the said So. within the before-mentioned period of 5 years, according to the form prescribed in the Schedule appended to the Act, a copy whereof should be annexed to the rules of each So. respectively.* The said returns to be transmitted to principal Sec. of State; and also return of all Sos. enrolled in each county during such period, specifying names, places, and date of enrolment, and the date of their ceasing to exist (35). Penalties for non-compliance (36). *Exemption from stamp duty (37).* Act to extend to all present and future Sos. (39). *Sos. already enrolled to conform to this Act within 3 years (40).*

The form of return as to sickness required: 1. Initials of members. 2. Trade or profession. 3. Date of birth. 4. Date of admission into So. 5. Date of becoming a free member. 6. For what time entitled to relief on account of sickness [col. for each of 5 years]. 7. What time entitled to relief on account of superannuation [cols. for 5 years]. 8. Date of death. 9. Place of residence on occurrence of death.

We have given the new features of this Act in italics. But there was also a new feature by omission: for there was *no limit in the Act as to the amount a F. So. might insure on the death of a member.* The main new features beyond this last were as to revision of rules; and as to sickness experience, and the number of new Sos.

One of the immediate effects of the passing of the Act of this year was the estab. of the *Clergy Mutual Assu. So.*, which was enrolled under the provisions of the Act, and which, in add. to carrying on the ordinary bus. of a mut. life office, founded an enlarged scheme of provision in case of sickness, which we shall speak of under HEALTH INS.

It was of the utmost advantage to mut. life offices to be able to obtain the legal protection of this Act, in the absence of any rational legislation for the regulation of joint-stock cos. in E. and W. In Ireland they had this.

This year (1829), too, there was founded the "Metropolitan Benefit Sos. Asylum," having among its Patronesses Her Royal Highness the Duchess of Kent; Her Royal Highness the Princess Victoria. The President was the Lord Mayor; while many other well-known names were included among the Vice-Presidents and Trustees:

The object of this inst. is to provide habitation, coal and candle for decayed members of Benefit Sos., who have belonged to one or more of those inst. for 10 years or upwards, of good character, and having attained 50 years of age.

In soliciting the support of members of Benefit Sos., the Committee feel assured it will be unnecessary to dwell on the importance and usefulness of such an inst., as it must be apparent to all. And that to rescue the deserving but unfortunate members of Sos. from the degradation of seeking parochial relief is sufficiently to induce the benevolently disposed to enrol themselves subscribers to the funds of the So. . . . (See 1835.)

This inst. is still in existence, and is performing its functions to the extent of the capacity of its funds. It requires further aid. (N. & Q. 5th S. viii. 176.)

During this year there was founded in Whitechapel a F. So.—the *Friend-in-Need*—which has figured very conspicuously at a later date. It was prob. more or less of a fraud from its inception. It appears to have remained in the form of a public-house Burial So. down to 1850. From that date it assumed much larger proportions, under the management of some "philanthropic speculators." In 1863 it was stated to contain about 130,000 members; and it then became converted into a limited liability co. From the accounts of the enterprise, as pub. in the 3 half-years preceding Nov. 1863, it was shown to have received £31,304 in respect of life pol. in its industrial branch; and £23,462 in contributions under its sickness branch. It was stated to have issued 200,000 pol. from its commencement. Its total available funds in hand at the end of 1863 were stated at £14,082, of which £6540 consisted of balances and arrears in hands of members and agents! It then entered upon a career of reckless amalgamation; and soon found itself in the Court of Chancery. [FRIEND-IN-NEED, ETC.]

There was printed by order of Parl. this year Mr. John Finlaison's *Rep. on the Law of Mort. of the Gov. Life Annuitants*, wherein was contained an observation "On the Sickness prevailing among the Labouring Classes in Lond." This will be reviewed in detail under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.

The Rev. J. T. Becher, M.A., pub. a new ed. of *The Constitution of F. Sos. upon Legal and Scientific Principles; exemplified by the Rules and T. of the Southwell F. Inst., according to the Stat. 10 Geo. IV. c. 56; examined, authenticated, and recommended by John Tidd Pratt, Esq., the Barrister-at-Law appointed to Revise the Rules of F. Sos., as well as by Wm. Morgan, Esq., F.R.S., and Arthur Morgan, Esq., Joint Actuaries of the Equitable Assn. So.; together with complete T. for calculating at every Period of Life the Value of the Assn. for Sickness, Annu., Reversions, and Endowments effected by Members of F. Sos., accompanied with Practical Illustrations: to which is added a System of Book-keeping now in gen. use among such Inst., 5th ed., "with an Ann. Graduation of the T.," wherein was contained some new T., which will be reviewed under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.*

Mr. James Wright pub.: *Treatise on the Internal Regulation of F. Sos.* (2nd edition.) 1830.—Mr. John Tidd Pratt, Barrister-at-Law, who, we have seen, had been appointed the Barrister to revise the Rules of Savings Banks, and upon whom, therefore, the duty of certifying the Rules of F. Sos. fell under the Act of 1829, pub.: *The Law relating to Friendly Sos., comprising the Stat. 10 Geo. IV. c. 56, with Explanatory Notes and Observations on the Framing of Rules.* This was a most useful practical guide, which passed through many ed.

The Rev. Hector Davies Morgan, M.A., pub. at Oxford: *The Experience and Method of Providing Assn. for the Poor, and of Adopting the Improved Constitution of F. Sos., constructed upon Principles calculated to ensure their Stability and prevent their Insolvency, and Governed by Regulations in Conformity with the Act 10 Geo. IV. c. 56, submitted to the Consideration of the Trustees and Managers of the Bank for Savings for the Hundred of Hinckford, in the Co. of Essex.*

There was pub. by Mr. Henry Gregson, Solicitor, Lancaster: *Suggestions for Improving the Condition of the Industrious Classes by estab. F. Sos. and Savings Banks, in Co-operation with each other; accompanied by a Set of Rules and Regulations for each; and also by Abstracts from the two last Acts of Parl. which regulate the same.* There was nothing in this book worthy of permanent record.

1831.—*Deposit F. So.*—There was founded this year the *Abbot's Ann Provident So.* (Co. of Hampshire)—a F. So. on a new and combined principle. The originator was the Hon. and Rev. Samuel Best; the outline of the scheme we shall give as far as possible in the words of its originator, as set forth in his *Parochial Manual*, and elsewhere.

Let the mind in the outset be divested of the idea of a common fund or club. The So. is rather a savings bank than a club. A member's money is and remains his own, and under his own control, under such limitations only as are necessary for the protection of all. Each member has his own fund, and at his own disposal, if circumstances should require it, to appropriate as he may think fit.

In the same Manual he, however, pronounces it to be "*A Savings Bank, a F. So., and a Medical Club, all in one.*"

The objects of the So. as set out in the Rules are provision against sickness or old age, the advancement or settlement of a member in life, and the receipt of deposits for relief in sickness or old age. The So. consists of hon. members, depositors and members. The chief peculiarity is that within certain limits members fix their own sick allowances, which are then supplemented out of a sickness fund formed of contributions of themselves and others, in a proportion determined by the class to which, after medical examination, they are assigned. Members are admissible at any age after 12. The rate paid by each member to the sickness fund is that chosen by him for his sick allowance; and he has to pay yearly, or as occasion may require, as many days sick rate as the average sickness of the members during the last 5 years determines: that is to say, if the average sickness of the last 5 years, taking the number of members and the number of days sickness, was 6 days, the member will have to pay to the sick rate 6 days sick allowance, whatever that allowance may be.

The classes (5 in all) are as follows: 1. Class A. healthy males, under 35, having no hereditary complaint in their families, and not following an unhealthy trade. These pay in

sickness one-quarter of their sick allowance, receiving the other three-fourths or *9d.* in the *1s.* from the sick fund. 2. Class B. healthy males under 35, *but having an hereditary complaint in their families; and healthy females, having no such hereditary complaint.* These pay a third of their sick allowance, receiving *8d.* in the *1s.* from the sick fund. 3. Class C. healthy females under 50, *having an hereditary complaint in their families; and males under 55 of doubtful health, or following an unhealthy trade.* These pay one-half, and receive only *6d.* in the *1s.* 4. Class D. females under 60, *of doubtful health,* paying two-thirds of their allowance, and receiving only *4d.* in the *1s.* from the fund. 5. Class E. all who are ineligible to the other classes, and who pay five-sixths of their sick allowance, receiving only *2d.* in the *1s.* from the fund.

Members are not entitled to sick allowance till after 6 months' membership. They cannot draw from the Provident So., or any other, more than *3s. 4d.* daily sick pay, *nor more than their average weekly receipts lost by sickness during the 6 months next preceding their application.* They may reduce their allowances, but cannot increase them after 50, nor before that age without 6 months' previous notice. The allowances of married women and members under 18 are restricted to *8d.* a day; but in case of confinement 1 month's sick allowance is paid, on the footing of a 3rd class member, *i.e.* half contributions.

Old age allowances are paid partly from the fund of the member, and partly from a fund raised for the purpose; 1st, by an ann. contribution from the surplus fund; 2nd, by an ann. levy of one day's sick pay on each member if under 40 when admitted, of 2 days if between 40 and 50, and of 3 days above 50; and 3rd, by rate upon the members according to their class if required. The *old age* allowance may be claimed after 70 in lieu of sick allowance; and in case of sickness the Committee may enforce the trans. after that age to the old age fund. No member can draw as an old age allowance more than half the amount to which during the preceding 10 years he was entitled as sick allowance.

Medical attendance is paid for by an ann. rate of not less than *2s.* on all A. members and children under 12 years of age; of *2s. 6d.* on B. members; *3s.* on C. members; *4s.* on D. members, and depositors claiming medical attendance; and on E. members, such a sum as the Committee determines on their election; the remainder being paid according to a "scheme of medical attendance" annexed to the rules.

One-fourth part of a surplus fund, being what is declared by the auditor ann. to belong to the So. after providing for all claims, is to be appropriated ann., in such proportions as the Committee may determine, to the medical, sick, and old age funds.

Interest is paid at the rate of the P. O. Savings Banks on every *10s.* deposited. No more than *1s.* monthly will be received from a member above 60, nor more than his average payment during the last 12 months from a member during his receipt of sick allowance, nor for 12 months after it ceases; but unless where payments and claims are suspended on notice given, every depositor and member must pay *1d.* monthly, or forfeit the same amount; 3 months' non-payment, at the discretion of the Committee, forfeiting the fund to the So. One month's notice is required for all withdrawals; 3 months' notice may be required for withdrawal of more than *£1*; and in case of the final withdrawal of a member, 4 weeks' sick allowance are deducted from his fund, and paid over to the sick fund.

The man. is paid for by an ann. rate of one day's sick pay, not being less than *1s.* on each member or depositor, or *6d.* if below 12 years of age; and of *6d.* in the *£* on each suspended account, together with a payment of 5 p.c. on the surplus fund.

The government of this So. is mainly in the hands of the hon. members—the Committee consisting of the Treasurer, 3 Trustees, the Sec. and 2 Visitors in each Branch or District (which may be constituted in any neighbouring parish), all chosen by the hon. members; and of 3 male and 2 female stewards, chosen for 5 years by the members 21 years of age.

All claims for sick allowance, and all payments by the member, cease when he is unable to draw the allotted portion from his own fund; but after the exhaustion of his own fund he may draw half-pay from the sick fund only, or from the old age fund, "for as many days as he has drawn sick pay or old age allowance continuously and immediately before" such exhaustion. If the fund of a member drawing old age allowance be not exhausted at his death, it shall repay the amount drawn from the old age fund to the extent of one-half of the remaining fund if necessary—the bal. being paid over to the person whom the Committee deems entitled, *Expulsion by the Committee forfeits everything, at the discretion of the Committee, to the So.*

"The above details," say the F. Sos. Commissioners, 1870, in their 4th Rep. p. lxxxv. (from which we have drawn the above outline)—"the above details will show that we have before us an exceedingly ingenious but most artificial system, *every element of which requires to be tested by experience.* Under the fostering care of the orig. projector, and thanks, no doubt, to the very large powers vested in the Committee—of which he was the soul—the *Abbot's Ann Prov. So.* seems unquestionably to be a success."

It had in 1873 about 791 members (independently of hon. members and depositors. In the *Abbot's Ann* parish itself, out of a pop. of 700, there were 450 members and depositors. The bal. on 1 Jan. 1872 was *£2710 9s.*; being an advance on the previous year of the amount of int. realized by the fund.

The yearly levies have never exceeded 2½ days' rates, and the rate of 2 days is considered sufficient.

The members are of all classes, from labourers earning 11s. a week (nominal). The amount generally insured for is 8s. a week; sometimes 10s. One very remarkable result of the system is, *that the requiring members to pay a proportion out of their own fund has the effect of keeping them off relief altogether.* "There is one man (said Mr. Best in his evidence) who could have had it these 5 years and has not drawn it, simply because he must begin by pulling his own fund to pieces."

It appears, although it is not so stated directly, that the first proceeding on joining the So. is to make a deposit. That appears to be the base of the whole system.

Among the better class of F. Sos. which had been estab. at this date in Scotland were: 1. *The Edin. School of Arts So.* 2. *East-Lothian Mut. Assn. So.* 3. *Leth. Mechanics So.* 4. *Glasgow John St. So.* 5. *Aberdeen Mut. Assn. F. So.* 6. *Dunfermline Friendly Inst.* Each of these enrolled a large number of members, frequently from the better classes of society.

There was this year founded in Cork, the *County and City of Cork Gen. Annu. Endowment So.*, of which we have given an account under its alphabetical title. The operations of this So. were suspended by the provisions of the F. Sos. Act of 1850. See our abstract of Report of Select Parl. Committee under date 1852. [NOMINATION POL.]

1832.—There was enacted 2 Wm. IV. c. 37—*An Act to Amend an Act, etc.*—which recites:

Whereas by an Act made in the 10th year of the reign of His late Majesty, etc., entitled, etc., it was enacted that, provided Sos. then already enrolled should not conform to the provisions of that Act within the space of 3 years from the passing of such Act, the said Sos. should then cease to be entitled to the privileges and provisions of any or either of certain Acts thereby repealed; but that the provisions of the said Acts thereby repealed should continue in force as to all Sos. estab. under any or either of them before the passing of the Act now in recital for the space of 3 years, or until they should sooner conform to the provisions of that Act. And whereas the said space or term of 3 years from the passing of the said recited Act will expire on the 19th June now next ensuing, and which will be in the current year, etc. And whereas many F. Sos. existing and enrolled before the passing of the said recited Act have not yet conformed to the provisions therein contained, and it is expedient to extend the space or term of 3 years granted by the said Act to such Sos. so to conform thereto.

It is then enacted that the application of the Act be extended as to pre-existing Sos. until 29th Sept. 1834. The Sos. formed in Ireland under the Act of 1795 might conform to the Act of 1829 within the like period. (See 1834.)

Mr. T. R. Edmonds pub. his well-known *Life T.* founded upon the discovery of a numerical law regulating the existence of every human being; and these he illustrated by a new theory of the causes producing health and longevity. The application of his law to the determining the contributions required by F. Sos. will be examined under F. Sos., MORT. AND SICKNESS EXPERIENCE OF.

The *Friends Provident Life* was founded at Bradford, Yorks, this year, under and in conformity with the F. Sos. Acts, as a mut. life office.

Bolton Unity of Odd Fellows.—This year there was founded, but whether by secession or otherwise does not appear, the *Bolton Unity*, whose full title is the *Ancient Noble Order of United O. F., Bolton Unity*. The general bye-laws of the Order provided that its head-quarters should be at 23, Mawdsley Street, Bolton-le-Moors, but at the ann. meeting of 1872, or 1873, these were removed to Manchester.

The Grand Lodge, which bears resemblance to that of the *Manchester Unity*, is elected by the ann. meeting of the Order from among the candidates nominated by the Districts. The ann. meeting is composed of representatives from the Lodges, and is held each year at a place fixed upon at the previous ann. meeting. A "copious rep." of the proceedings of these ann. meetings is required, by rule 31, to be printed for the use of all the Lodges; they are thus all kept informed of the matters affecting the interests of the Order.

There is another most important rule, 43.

That no Lodge of this Order shall be allowed to appropriate any portion of its fund to the support of Trades Unions during the time of any dispute between employer and employed; such an application of Lodge funds being contrary to the objects for the carrying out of which this Order was estab.

This is as distinct, as it is wise and proper. There should be no possibility of misappropriating funds raised for the beneficent purposes of sickness and accident, to the base purposes of organized conspiracy.

The Order only became regis. in 1862, or after 30 years of working. From that date there has been a growing tendency in the Order to obtain true returns, and in fact to place the Order upon a sound bus. footing. Forms are issued asking the Lodges for information as to their numbers and finances; their sickness experience, the amount expended, number of deaths, etc.

From the ann. account of the Order for 1871 it appeared that there were 20,480 members in 356 Lodges—giving rather more than 57 members to a Lodge. Of these, 172 Lodges, with 9714 members, were in Lancashire; and 96 Lodges, with 5339 members, in Yorkshire, and nearly all the rest on the banks of the Tyne, or in Durham. In October 1872 there were 370 Lodges, with 22,048 members. The rules of about 300 Lodges were regis. The increase of members is about 1000 p.a.

The 40th ann. conference was held in Manchester in 1872. There were 112 delegates

present; but Lodges containing in the aggregate 3000 members made no return to the executive. The returns received embraced 19,000 members, and showed an expenditure of £8164 paid for sick allowance to 6573 members; and £4785 for funeral money for 216 members, 181 members' wives, and 495 members' children. Funds in hand £31,744, or £1 13s. 5d. per head. The Committee reported severely upon many of the Lodge Secretaries in regard to the careless manner in which they supplied the information requested by the Grand Lodge executive. It was stated that 220 Lodges had gone down, *i.e.* become extinct in the Unity during the 40 years of its existence.

There was nearly being a serious secession of some 4000 of the Newcastle members at this very conference. Mr. Hugh Hodson of Newcastle stated the case on behalf of the dissatisfied members:

... If the Lodge to which he belonged should cease to exist at any time, he should be no longer a member of the Unity. He wanted to remain a member; but to be a member on such conditions that he would be recognized as a Brother so long as he conformed to the rules of the Order, *no matter what the fate of the particular Lodge with which he was connected might be* (hear, hear). He said that the Union ought to be reconstituted on the basis of fraternity and unity. That was the principle they in Newcastle wanted to work up; and that was the principle upon which they contended Odd Fellowship should be built up. If this question should be taken up and discussed by the conference, and if the Union should be reconstituted on a footing of greater equality, then the Newcastle members would remain in the Bolton Unity, and would be the backbone and cornerstone of the Order in the North of England. As the Order was at present constituted, the Lodges were no better than *monthly clubs which broke up at the 12 months end.*

There is a very important principle involved in the point here discussed.

There was this year founded the *Burial So.* popularly known as *St. Patrick's*; but which bears the regis. title of the *United Assu. F. So.* It is stated to occupy the 4th position in regard to number of members among the Burial Sos. The So. was said to be under the especial patronage of Cardinal Wiseman and the principal Roman Catholic Bishops of the U. K.

By 1862 the So. was reported to have about 120,000 members, with an income of £37,508; and an accumulated fund of £22,275—or 4s. p. member, which was stated to be quite sufficient for its then requirements.

With the man. of the So. at about this period there was associated a great deal of scandal, which ultimately called for the interference of the Catholic Clergy. Those who desire details may consult the Hon. Mr. Stanley's Rep. as Assist. Commissioner (under the F. Sos. Commission of 1870), pub. 1874, pp. 29-30. Mr. Treacy was then the Sec. of the So. Mr. Stanley gives in the Appendix of his Rep. the following documents:

1. Rep. of the case of Sweeney *v.* Treacy, taken from the "Northern Press," a Liverpool paper, 15 Oct. 1864.

2. Rep. of the case of Caraher *v.* Treacy, from the same paper, 22 Oct. 1864. It sets out the pleadings against Treacy and the agreement to refer.

3. Rep. of Mr. Cottam, the Accountant appointed by the Court to go through the books of the So., and ascertain the amount due by Treacy, dated 29 Jan. 1865.

4. Manifesto of Mr. Treacy, dated 1 May, 1865.

5. Order of Liverpool County Court against Treacy for £7477 14s. 6d. dated 10 May, 1865.

6. Rep. of an action for libel brought by Treacy, copied from "Northern Press," 19 Aug. 1865.

7. A rep. from "Liverpool Mercury" of 26 April, 1867, of a meeting of the *St. Patrick's So.* at the Odd Fellows Hall, St. Anne Street.

8. An account of a subsequent meeting, from "Liverpool Courier," 21 Sept. 1868.

Mr. Stanley says: "These documents, with the evidence given before the Commission, will suffice to show how unavailing the machinery of the F. Sos. Acts is in Sos. such as the one which we are examining to protect the members against their own servants."

Mr. Treacy is long since dead, and we hope the So. is under process of reform.

The number of members in 1871 was said to be about 140,000; funds in hand £15,311.

The *South Bucks F. So.*, which has grown into considerable importance, was founded this year, with head-quarters at South Missenden. One of its chief features is the large number of hon. members, and the interest they have taken in the working of the So. The orig. scheme of the So. was to defray the expenses of man. by means of the subs. of the hon. members; and this has been to a considerable extent accomplished. The So. was founded upon T. supplied to another So. by Mr. Finlaison.

In 1844 the affairs of the So. were investigated by Mr. Henry Marshal, Act. of *Metropolitan Life*, and there was found to be a surplus of £428 11s. 2d.

In 1849 Mr. Marshal made another investigation, and the surplus had then increased to £1140 15s. 7d.

In 1853 the affairs of the So. were again investigated, and the So. was prospering, although not quite in the same degree as previously. There were then 1073 members, and 12 branch Sos. There was then pub. a fo. vol. of reports, etc., the title-page of which says: "This hist. is intended as a record of the most important alterations and transactions which have occurred to the funds of this So. up to the present date; which, if left to be collected from the scattered minutes by those who may hereafter take

part in the direction, would cause great perplexity and prob. be but imperfectly comprehended." There is a certificate from Mr. Marshal as follows: "Having had the proof-sheets of this hist. submitted to me, I hereby certify that such hist. is in all respects correct, so far as regards those transactions of the So. herein related in which I have taken a part."

Most of the details given have no interest beyond the members of the So. It would be well, however, and attended with but little expense, if the larger Sos. preserved records of their own histories.

At the close of 1875 the So. consisted of 897 members, with an accumulated fund of £14,600—being £16 5s. 6d. per member, an unusually large amount.

There was this year founded the *Post Office Employes Friendly Burial So.*, held at the Adam and Eve, Jewin Street, London. In 1875 it had 1302 members, and £908 in hand. This is distinct from the *Lond. Post Office Benefit So.*, founded 1851, and which has made very small progress.

1833.—A Select Parl. Committee sat this year to collect evidence upon "Parochial Registration." Among the witnesses examined were Mr. John Finlaison, who stated that the diversities in mort. and sickness which existed in different parts of the country were utterly unknown; that T. for the use of the poor, in reference to sickness and mort., and in reference to the regulation of their F. Sos., could not then be constructed for 2 districts differing in character, from the want of such information as an improved system of regis. would afford; and that if 2 Sos. of poor men residing in districts of a totally different character were at any time to apply to him for T. to guide them in preserving their Sos. solvent, he "should be under the necessity of giving the same T. to both, *though knowing perfectly that the rates which were adequate in one case were inadequate in the other.*" (See 1839.)

Orders of Druids.—We speak in the plural here because there are several Orders of Druids, respecting which we find it almost impossible to discriminate. It is claimed that the Order was established in 1781; but of this we have seen no evidence. The re-organization of the Order is said to have taken place in 1833; and under this date we give it chronological place. It may have been that several sections of the Order reunited at this period; or it may be that the sickness benefit elements were then introduced for the first time.

The first regis. of any of the Lodges of the Order which we can trace was that of the "Fortitude Lodge of Old Druids," at Leigh (Lanc.) in 1829.

It appears that the two principal Orders are respectively located, as to their head offices, in Clerkenwell (Lond.) and in Hull.

Regarding the head office in Clerkenwell, it appears to have very little to do with the Branches. Indeed, beyond granting Dispensations for the opening of new Lodges, furnishing certificates, regalia, etc., and holding a biennial meeting, the management appears to be merely nominal.

Speaking of the Lond. section as the *Order of Ancient Druids*, it appears that in 1872 it consisted of 285 Lodges, with 19,317 members, giving on an average 68 to a Lodge. The Lodges were extended through 22 counties of E. and W.; but Yorkshire contained 111 of these, with 7829 members—or about two-fifths of the whole.

The numerically largest of the several Orders is that known as the *Order of Druids*, and is prob. a split from the *Order of Ancient Druids* already spoken of. This offshoot has outgrown the parent stock in numbers at least.

The Order, in its *Directory* for 1871, stated that it numbered 168 Districts, 1007 Lodges, and 57,795 members. Of these, 157 Districts, 959 Lodges, and 15,542 members were in *England*; 7 Districts, 29 Lodges, and 1525 members in *Wales*. In *Ireland* 32 members. In *Australia* 696 members. In *Canada* 1 Lodge, the number of members not returned. The Lodges are small, not averaging more than 58 members.

In view of the smallness of the Lodges, it has become the practice to "equalize their Districts" for sick pay. The plan is to make the whole District one So. for sick pay, as well as for funerals. The Lodges are kept up as places of meeting for payment of contribution, and for social purposes; they are also the units which elect representatives who govern the District at the half-yearly meetings; but the contributions must all be accounted for to the District Officers, who only leave such a small sum in hand as is needed for the continuous working of the So.—the great mass of the money being invested on behalf of the District. The Lodges, however, are only bound to account to the District for the contribution to the Sick and Funeral Fund. The "Management Fund," out of which the doctor is paid, is left to the control of the Lodge itself.

In the Manchester and Salford equalized District the contribution was 4d. a week to the sick and funeral fund; and 2d. a week, or 8s. 8d. a year, to the management—of which about 4s. went to the doctor, from 1s. 6d. to 3s. in Lodge liquor, "which is entered in the accounts as rent of room," and after payment for stationery and other sundries, the bal. went to benevolent purposes. "This surplus is more or less according to the amount of liquor consumed." In the autumn of 1873 this District adopted a scale of contributions graduated according to age.

On the whole, the *Druids* Sos. are regarded as being cheaply but very badly managed.

The Hon. F. Lyulph Stanley, one of the Assistant Commissioners to F. Sos. Commission of 1870, says in his Rep. (1874), p. 12 :

The Druids in their General Laws have thrown great difficulties in the way of good management. The General Order is strictly forbidden to take any cognizance of the financial state of the Lodges, so that there is no supervision whatever. Another objectionable feature is the deciding of all appeals by the Gen. Meeting of the Order, or rather by Appeal Committees appointed at the Gen. Meetings. The Druids have, however, taken a step forward by appointing a permanent Sec. and taking an office in *Manchester*. There is, however, an intense jealousy and ignorance in the Lodges of this Order, which resists any interference or advice even from brother members. Meantime it is prob. that nine-tenths of the Lodges at least are insolvent, and a large majority of them almost hopelessly so. But habitual repudiation of their liabilities by closing the box for a time, or reducing the rate of sick pay, enables them to pull through. In many Lodges insolvency is recognized by their rules and raised into a practice—there being a provision that when the funds are reduced below a certain amount, the sick pay shall be reduced in a corresponding manner. The fact is that these more backward Sos., such as the Druids, are now passing through the transition which the *Manchester* Unity effected 25 years ago—that from a semi-convivial club to a mut. and provident assu. against sickness.

We can only hope they will come out of all this as nobly as have done the said *Manchester* Unity of Odd Fellows.

The Druids have a remarkable feature in regard to the voting by their delegates at the ann. meetings—they take the votes of the delegates not personally but as representing the constituencies who send them ; so that a motion is recorded as being supported, for instance, by 30 delegates, representing, say, 18,000 members.

The Order has held ann. meetings since 1857. It is now (1876) reputed to have 353 Lodges, with 25,355 members, with accumulated funds of £102,123.

There are various other Orders of Druids, as the "*Leigh* Unity," the "*Modern*," and the "*Independent*" Orders. There is also a *Female* Order "*Leigh* Unity." We find, too, a Lodge of *Female* Order of Druids regis. as located at *Ashton-under-Lyne* in 1831. Several *Female* Lodges located at *Leigh* were enrolled in 1835 and 1836.

There was founded the *Birmingham Gen. Provident and Benevolent Inst.*, which was formed by an amalg. of several Sos. in connexion with Sunday Schools. The Hon. E. L. Stanley, one of the Assistant Commissioners under F. Sos. Commission, 1870, says in his Rep. (1874, p. 182):

Perhaps it is owing to a natural re-action against the mismanagement and waste of so many of the Affiliated Orders in *Birmingham* ; but it is certain that there is a large[r] development of F. Sos. conducted as a mere matter of ins., and also of rich sick clubs in connexion with religious bodies, than in most towns.

In 1867 a valuation was made of the position of the Society. It had a surplus of £5050 18s. 6d.

This So. had in 1870 about 5025 members, with funds £30,130 ; at the close of 1875 there were 3379 members, with an accumulated fund of £37,997. (See 1841.)

There was founded this year at *Darton*, near *Leeds*, an Asso. called the *Darton Collieries Club*, "for the relief of its members, during any illness that might arise from accidents happening to them while at work at the colliery." We shall give some account of the experience of this Club under MINERS (COAL).

This year there was founded the *Birmingham Gen. Provident and Benevolent Inst.*, which by 1854 had 8000 members. Many interesting details regarding the So. were given by the Rev. Wm. Gover before the Select Parl. Committee on F. Sos. 1854.

There was founded this year at the "*Dog and Pot*," *Stoke Pogis* (Bucks), the *Benevolent Brothers* F. So. This So. at the close of 1875 had 114 members, with an accumulated fund of £2816—being at the rate of £24 14s. p. member : a sum equalled by few F. Sos. in the U. K.

1834.—There was enacted 4 & 5 Wm. IV. c. 40. This Act repealed the power given to Justices to reject rules unless they considered T. sufficient ; also the priority of payment of debts due to F. Sos., and otherwise amended the Act of 1829. The purposes for which F. Sos. might be formed were modified ; and made as follows : "for the mutual relief and maintenance of all and every the members thereof, their wives, children, relations, or nominees, in sickness, infancy, advanced age, widowhood, or any other natural state or contingency whereof the occurrence is susceptible of calculation by way of average, or for any other purpose which is not illegal. Provided always that when the rules of any So. provide for relief in any other case than that of sickness, infancy, advanced age, widowhood, or other natural state or contingency as aforesaid, the contributions for such other purpose shall be kept separate and distinct, or the charges defrayed by extra subscriptions of the members at the time such contingencies take place."

The provisions of former stat. were to remain in force as to Sos. estab. under them until they should conform to the provisions of the Act of 1829.

Again, there was no limitation of the amount which might be insured on the life of any member, or on the life of the nominee of any member : for in this Act the word "nominee" is first introduced in this sense.

By sec. 6 it was enacted "that the returns of the rate of sickness and mort., according to the form prescribed in the Schedule appended to the said recited Act [of 1829], shall be transmitted at the period therein mentioned to the Barrister or Advocate by whom the rules of the So. may have been certified, and shall by such Barrister or Advocate be transmitted to the Sec. of State for the purposes in the said recited Act provided."

Mr. Bunyon, in his able work on *Life Ins.* (pub. 1854), offers the following summary of the advantages offered by the F. Sos. Acts already noticed :

The object of the repeated Acts appears to have been the encouragement of provident habits in the lower classes, and the diminution of the public burdens under the poor law. In this statute [of 1834] the legislature pursued the same course, by an Act, as it were, of national bounty towards the poor, granting great and extended privileges to these Sos. Their transactions were for the most part exempted from stamp duties. They were permitted to pay their funds into the Savings Banks, and into the Bank of England, to the account of the National Debt Commissioners, on extremely favourable terms. A priority was given to them in the payment of debts, in the event of the death, bankruptcy or insolvency, etc., of their officers entrusted with the charge of their funds. A special machinery was provided for the transaction of their bus.: the members of each So. being able to frame rules for their government, which rules were to be certified and registered in manner appointed by the Act; and were to be binding on the So. as, so to speak, its Deed of Settlement: but nevertheless liable to alteration and amendment at general meetings, which were to be convened in manner therein appointed. The property of each So. was vested by virtue of the Act in the trustee or treasurer for the time being, who was enabled to sue and be sued in his own name, while all disputes between the members arising by virtue of their membership were to be settled, either by reference to the Justices acting in the county in which the So. was estab., or to arbitrators appointed to act for the So., whose awards the Justices were empowered to enforce, the choice of the two courses being in the first instance decided by the rules of the So.

The Acts also contained a variety of other provisions, entitling and permitting, among other things, minors to insure; applications to be made to a Court of Equity by petition, with exemption from fees, etc. The Registrar to whom also an appeal was appointed for the settlement of certain disputes, to order the transfer of stock standing in the name of a trustee out of jurisdiction of the Court, etc. The payment of certain small claims under £20 to the next-of-kin of a member without the necessity of administration. General accounts were to be prepared and delivered to the members on the payment of a small fee; and periodical returns, which were to be ultimately transmitted to the Sec. of State for the Home Department, were to be made by each So. of its experience as to sickness and mort. Provisions were also included for the dissolution of the So. with the consent of a certain portion of the members. And withal they might insure sums of as large an amount as those which were insured by the oldest and most wealthy ins. offices.

An art. in the *Quarterly Review* for January this year on the "Poor Law Question" contains the following (p. 371) :

Many laudable attempts have been made of late to combine and extend the advantages of Savings Banks and Benefit Sos. But experience has proved what might have been foreseen, that while the Poor Law holds out the certainty of relief under every casualty, it is hopeless to expect that the labouring class will voluntarily submit to privation, and pay for that which they are sure of obtaining gratuitously when they require it. In Hampshire, Wiltshire, Dorset, and several other counties, benefit sos. were founded a few years since on a wider scale, and under judicious regulations, offering to the poor the means of insuring themselves against want in every shape, upon the most safe and equitable terms. But we believe in every instance these inst. have fallen still-born to the ground for the want of contributors; and we shall be very greatly mistaken if the advantages offered by the late Annu. Act are not equally disregarded. The benefit clubs which do succeed in obtaining members are only, in truth, apologies for convivial meetings. The depositors in savings banks belong to the class of domestic servants and artisans rather than to the inferior class of labourers. The feeling is all but universal among the latter, "Why should we sacrifice our money only to relieve the parish from the necessity of providing for us in sickness and infirmity?" So long as the Poor Law exists (and no one is so insane, it is to be hoped, as to desire its abolition without providing any substitute), the only mode whereby the advantages of these excellent inst. can be extended to the labouring class, will be by enforcing their contributions—by a law which shall compulsorily take a portion of the earnings of every labourer during his years of health and vigour, to provide for his season of exhaustion or sickness.

The poor-rate would, under such an alteration as here proposed, cease very shortly altogether, and be superseded by a General Benefit So. for the mut. ins. of all the members of the community against destitution. Providence will thus be methodized and guaranteed. The thoughtless and extravagant will be compelled to contribute, while they are able, to that fund upon which they fall back for maintenance whenever their means of self-support are exhausted. Will it be objected that the benefits which all acknowledge to flow from every voluntary system of mut. ins.—whether against fire, casualty, old age, or want of employment—disappear when the contribution is made compulsory? We cannot see why this should be so. Gov. itself, with its vast machinery of taxation, is but a great system of compulsory mut. assu. against the evils of internal disorder and external violence. And may not a tax be levied with equal justice for a mut. assu. against want and extreme distress? Nay, a tax is imposed at present for this very end—but frequently on the wrong parties—and always in a form which gives it a false and mischief-working character. We would have it shifted on the right shoulders, and make it appear what it really is or ought to be—a mut. assu. of the member of society against destitution. As for the trouble, the expense, or the difficulty of carrying such a scheme into execution, we conceive that, when methodically and earnestly set about by competent persons, it would be worked with far greater facility than the present clumsy and mismanaged system, and at a tithe of its expense. The same machinery by which it is proposed to work the Gov. Annu. Act will be all-sufficient for this purpose.

Our proposal is but indirectly to compel every individual to take that prudent step which the framers of the Annu. Act (vainly, as we think) wish every one to take spontaneously. We need not enlarge on the vast security against political disturbance and agrarian attacks on property, funded or otherwise, which would accompany a state of things in which every individual in the community shall be possessed of a stake to the amount of his contributions in the accumulated annu. fund, and be thus bound, as it were, in recognizances to that amount for the preservation of order and the general protection of property.

Slavery was abolished in the British Possessions in the *West Indies* from 1 Aug. this year. We soon afterwards hear of the formation of 2 F. Sos. among the "free blacks," viz. "The Bahama F. So.," and the "F. So. of Grants Town," the Rules of which Sos. were said to be as well and as clearly drawn as those of many of the Lond. Sos.

Order of Foresters.—But the leading event of the year must be regarded as the origination, at least on a modern footing, of the *Ancient Order of Foresters*. This Order, perhaps in view of justifying the prefix "ancient," has claimed a "mythological origin," not being content to go back simply as far as Adam! They claim in membership Alfred the Great and "wise King Jamie." For this last they seem to have something of an

historic title. Osborne the historian records how he had "seen James the First, who was passionately fond of the chase, attired in the dress of a Forester, green as the grass he trod upon, with a feather in his cap, a bow in his hand, a sheaf of arrows at his back, and a bugle by his side instead of a sword." Thus say the Foresters, "British Monarchs as well as their knights and retainers have been proud to be decked with the insignia of our Order"! We quote this mainly from Hardwick's *Manual*, 1859, p. 7. It seems an obvious omission that Robin Hood and his band are omitted from the list of early returns.

But coming down to more rational times, "It appears from records that our inst. was founded at Knaresborough Castle, Oct. 29, 1745, under the title of the Royal Foresters, by which name it continued until, at a Grand Convention of Delegates held at Rochdale, 1834, it was changed, and is now known and respected throughout the world as the *Ancient Order of Foresters*."

It was prob. on the occasion last named that the Order assumed the shape and tone of a F. So. as now understood; and hence we have placed it in this chronological order. It is not a little remarkable that the year 1745, in which it claims its modern revival, is the same year in which (as we have seen) the *Odd Fellows* claim their first modern mention. Hence we have the two great Affiliated Orders claiming their modern origin in one and the same year. We shall require further evidence than is yet adduced in order to feel any confidence in the claim. A split in the Masonic Orders might indeed account for the coincidence.

The Foresters rank as the earliest of the Affiliated Orders regis. under the F. Sos. Acts. It is the second largest of the Affiliated Orders of F. Sos. It is now required by the High Court of the Order that all the Courts be regis.; this is being rapidly accomplished.

The central government of the Foresters is an "Executive Council," and the Head of the Order for the time being is the "High Court Ranger." It is a peculiarity of the Foresters that they have no fixed seat of gov. for the Order: the central office being shifted ann. with the High Court meeting, and the central authorities being thus necessarily chosen from the neighbouring branches. Whilst this has prob. acted as a powerful means of propagandism for the Order, yet the result is (as remarked by Mr. Stanley, one of the Assistant Commissioners, 1870) that "there is a constant change in the gov., and the Order loses the benefit of the continued services of the most experienced men." Again, the Ann. High Court Meeting (answering to the A. M. C. of the Manchester Unity) consists of representatives from the Branches (termed "Courts"), and not from the Districts.

The Foresters differ from the Odd Fellows, and are more stringent, in this that they require a return of the "Management Fund" as well as of the Sick and Funeral Fund. The High Court has severely deprecated expenditure from the man. fund for liquor or ann. feasts. But in spite of their rule (says Mr. Stanley) prob. more money is spent from the common fund for these purposes by the Foresters than by the Odd Fellows (p. 9). He adds:

The Foresters have prob. a greater number of agricultural labourers among their members than the Odd Fellows of the Manchester Unity have; and of late years they have extended widely in these districts, and have incorporated many of the old village clubs. It cannot be denied that an element of festivity is a great attraction in these places; and so long as the sick and funeral fund is not infringed upon, and the contributions are kept adequate to the benefits, it might perhaps not be undesirable to leave the social side of the members' expenditure to regulate itself according to the wishes of the majority, provided that no fresh contribution is put upon members who have already joined on a different understanding.

In 1846 the Order consisted of 161 Districts, 1614 Courts, and 76,990 members.

In 1855 Mr. Watkins pub. a *Rep. on the Foresters*. It appears that before this date the initiations, deaths, etc., were not systematically tabulated. The initiations during this year were 14,053; retirements, 4517; deaths, 1270; members' wives, 1008.

The growth of the Order as to numbers we can only trace in the later years. In 1850 it had 1553 Courts and 80,089 members. In 1858 it had 172 Districts, 1917 Courts, and 135,001 members. In 1868 the number of members was 349,022; in 1870 it had increased to 376,663; in 1872 to 421,988; 1874 to 446,888 members. The average age on admission of members during the 5 years 1866-71 was found to be just over 26½ years. The average number of members in the Courts has increased from 45 in 1845 to 96 in 1870, and 99 in 1871, and 103 in 1872. The proportion of "Court Funds" per member has increased from £3 7s. 8d. in 1870, to £3 10s. 7d. in 1872.

On the 1st Dec. 1871, the A. O. of F. numbered 246 Districts, 3988 Courts, and 396,244 financial members, or on an average 99 in each Court. There were also 8157 honorary members. There were regis. under the F. Sos. Acts 204 Districts and 3306 Courts. There were 14,771 Juvenile Foresters. The Court funds amounted to £1,371,200; the District funds to £156,739. There were 1345 Courts with graduated scale of contribution. The increase for the year was 57 Courts; 19,581 financial members; and 486 hon. members.

Of the whole Order at this date the members were located as follows: *England*, 351,682; *Wales*, 16,476; *Scotland*, 6615; *Ireland*, 1991; in the *British Colonies*, 17,948; in the *U. S.* 1532.

There had been up to the end of 1872 some 32 suspended Courts, with 2802 members.

Some of these were believed to have acted for themselves, and the Independent Order of Good Templars; the Royal Foresters (new order); the Foresters of F., the Law and Independent Order of F., Good Templars (Tenny); and the Foresters, using themselves the "Gallant Navy".

During this year there was printed: *Rep. upon the Success of the Ancient Order of Foresters F. So. for the Year 1870, presented to the Executive Council by F. G. F. Ainslie, F. S. S., Member of the Court, "Duke of Argyll," No. 2670.*

The members of the Order have presented their Report to the National F. S. Inst., the act being sanctioned by voluntary contributions; and its amount is provided for in the same manner.

In Jan. 1873, was pub. in the Rep. of the Executive Council—*Rep. by Mr. New, jun., on the Success of the Ancient Order of Foresters, based upon the returns for the year 1872.* This will be reviewed in more detail under F. So., Mur., and Foresters. Examination of (1) may be sufficient to state here that it bears close resemblance to that of the Odd Fellows, at the younger and middle age save particularly.

On 1st Jan. 1875, the Order had 275 Lodges, 1373 Courts, and 401,766 members. The statistics affecting the progress of the Order during the 20 years 1856-75 are the summary up by Mr. Keison:

Number of members 1 Dec. 1856	201,577	Court-fiscal members	—	—	2,536
Initiations	—	—	—	—	1,734
Initiations in Colonies	—	—	—	—	2,547
Reinstated	—	—	—	—	315
	—	—	—	—	40,499
	—	—	—	—	203,045
	—	—	—	—	Number of members 1 Jan. 1877 401,106
Total	—	—	—	—	762,781

The literature of the Order is not yet extensive. It has a quarterly magazine—the *Foresters' Messenger*; and a *Directory* pub. and containing a vast amount of useful information, statistical and otherwise. In the *Directory* is contained a list of the Widows and Orphan Funds in connection with the Order, and many other facts of interest to the members.

There is a peculiarity about the *Ancient Order of Foresters*, which is, that within the Order there is a second Order called the *Ancient Order of Shepherds*, whose Lodges are Sanctuaries. No one can be a Shepherd without being also a Forester. The object of this second Order (says Mr. Stanley) is to insure for all benefits. A Sanctuary is always connected with a Court, but all the members of the Court are not required to become Shepherds. The funds are kept quite separate, though the same officers generally do duty for both So. There were on 1 April, 1875, 38 Districts, 577 Sanctuaries, 21,459 members, with £29,225 in funds, belonging to the *Ancient Order of Shepherds*. (A 477 Sanctuaries, 428 were regis. under the F. So. Acts. In 1852 there were but 5022 members of this Order.)

This *Ancient Order of Shepherds* must not be confounded with the Order of Ancient Shepherds, Ashton Navy.

There was pub. this year: *Practical Plans for the Protection of Benefit So. by James Wright.*

1836.—By the 5 & 6 Wm. IV. c. 23—the *Loan So. Act*—the operations of the F. So. Acts were extended to the Islands of Guernsey, Jersey, and the Isle of Man, and the Rules of F. So. there founded, or any alterations thereof, were to be submitted to the Registrar in E. and W.

Mr. Charles Ansell pub. his well-known work: *A Treatise on F. So., in which the Doctrine of Int. of Money and the Doctrine of Prob. are practically applied to the Affairs of such So.; with numerous T., and an Appendix containing the Acts of Fwd. relating to such F. So.* "Pub. under the superintendence of the So. for the Diffusion of Useful Knowledge." The work attracted a very considerable amount of attention. The author says in his "Preface":

The parts of the following small work which the author considers to deserve the most attention are:—those which relate to the actual experience of a large number of F. So., as to the quantity of money, as well as the rate of mort. among the members—now for the first time pub., as regards such So. in Eng.; and also, the mode of applying that experience in determining the requisite contributions to provide for an allowance in sickness; to those objects the author has directed the chief part of his attention. He is not aware that he has been preceded in the pub. of any accredited data as respects the sickness experience among F. So. in Eng.; or in the application of the doctrine of Int. of Money to that part of the subject; and since there are few who act as pioneers on such occasions, he feels much room for improvement, he is quite prepared to learn that his work is defective and requires amendment.

There has been taken to introduce nothing but what may be very easily understood by persons unacquainted with the most simple principles of Algebra.

In 1836, when the F. So. recently estab. certain ann. called "endowments for children" have been introduced, which allow the members or others to secure by small monthly or ann. payments certain sums for children on their attaining given ages; and in some So. the same principle has been extended to other cases of a like nature. The consideration of such transactions has been advisedly omitted in the following treatise—not because it is supposed there is anything objectionable in their nature or their adoption, but for the reason that the introducing them among the objects of a F. So. would necessarily interfere with that simplicity which seems to be absolutely essential to its good

man., if it be intended that the members of the inst. should exercise any control over its affairs. The Sos. alluded to as having admitted the principle of endowments in their plans have been estab. and conducted under the personal superintendence of a few zealous and intelligent individuals among the clergy and gentry, whose leisure has permitted them to dedicate a large share of their time to the bus. of the inst. to which they have respectively attached themselves: and so long as the leisure of these philanthropic persons shall allow them to continue their useful exertions, all will possibly be well; but should these Sos. be deprived of such valuable aid, it is not unlikely that their multifarious transactions will be found a serious evil, and the intricacy unavoidably caused thereby may throw all the influence and control of their man. into the hands of a small number of members, prob. to the great detriment of the interest of the rest. If, however, it should be thought desirable at any time to embrace the assu. of endowments in the plans of a F. So., and satisfactory data should be collected from which to determine the rate of mort. prevailing among the children of the labouring classes, the principles laid down in the following pages will be found of easy application to the purposes in question. *That the admission of varied objects into Sos. is not necessary to their success, seems sufficiently evinced from the experience of the life assu. offices estab. in Lond.*

Much that was contained in the body of the work, although valuable at the time, has ceased to have any especial interest now. One or two passages may, however, be quoted with advantage. Thus (p. 105):

It is essential to press most earnestly on the consideration of all those, on whom it may hereafter devolve to apply the above rules to real cases, that the very first object to be obtained by F. Sos. is security; and that it will always be more easy to return a surplus that may have been created by a wise caution in fixing a So.'s rates than to provide for a deficiency, caused either by the adoption of less sound principles, or by a course of unfavourable events, to which all inst. like F. Sos. are exposed; especially when they do not consist of very large numbers of members.

Something further, however, than a mere sufficiency of the contributions was necessary to the well-being of F. Sos.; namely, that their rules should efficiently provide for the due administration of the contributions when received. To this end the chief means are—1. A strict economy in everything relating to the management. 2. A uniform watchfulness for the prevention of fraud. 3. A careful and constant employment of all the funds at interest. These objects should never be lost sight of in forming a So.'s rules (p. 135). He continues:

A great foe to economy in conducting the affairs of these Sos. is the holding their periodical meetings at public-houses. The positive waste of money resulting from this very frequent, but objectionable, practice, is greater than, without examination, will be believed. It is thought that not fewer than 1,000,000 persons in this kingdom are members of F. Sos.; and probably each person does not, on an average, spend less than 5s. p.a. at the monthly meetings and yearly feasts. *The ann. expenditure for what is in many cases a worse than useless purpose will therefore not fall short of £250,000. A sum of 5s. p.a. for each member of a F. So. is vastly more than sufficient to defray the So.'s ordinary and necessary expenses of man. A man aged 25 could for an ann. contribution of 5s. secure to himself a superannuation allowance after the age of 70 of £10 or £11 p.a.; or he might for such an ann. payment provide an allowance in sickness until the age of 70 of 3s. 6d. per week; or for a payment at death of at least £10. These are pecuniary advantages which might result from a discontinuance of holding the meetings at public-houses or inns; but much more moral good would also follow a reform in this matter. There can be little doubt that the foundation of habits of general intemperance is frequently laid by men who, with the best original intentions, became members of Sos. estab. by interested persons, with the sole motive of benefiting a favoured public-house; and it is no uncommon occurrence in seeking to let such a house, to mention, as a special recommendation of it, that two or three benefit clubs meet there.*

He adds by way of note:

Since the above remarks were written, an instance has come to the author's knowledge, which exemplifies in a very forcible manner the evil here spoken of. It is that of a So. in which each member has to contribute 4d. for spending money on every monthly night of meeting, whether he be present or absent; and the aggregate of the spending money is always drunk out by those who may chance to attend. The So. alluded to consists of 250 members, and the spending money is therefore £4 3s. 4d. per month. At the meeting in July, 1833, 26 members only were present: so that each had to consume drink costing 3s. 2½d. After a large quantity of beer had been consumed, ardent spirits were drunk, and ultimately beer was thrown out of the windows: because the whole of the money was to be expended for the good of the house. Such a case needs no comment; but it may be stated that some of the members whose fourpences were taken from the fund, and expended, might in fact leave the So. and never pay their contributions; in all such cases the So. would therefore lose the fourpences spent. (p. 137.)

He suggested that the parochial school-room might be used for the purposes of the club. He further suggested that a "central office in Lond. for the aid and convenience of F. Sos." might be with advantage estab. (p. 149). And finally, he urged the importance of the prompt investment of all surplus funds, so that int. and compound int. might be realized.

He gave a series of value T. deduced from the sickness and mort. experiences of Friendly Sos. These will be referred to in detail under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.

There was this year pub. by Mr. William Sanders: *Rules and T. for Provident Inst. compiled and calculated for and pub. by the So. for Promoting the Estab. of Clubs on Sound Principles.*

Mr. Tidd Pratt reported to the Poor Law Commissioners—*vide* their Rep. for this year—as follows:

The increase in the number of F. Sos. since the passing of the Poor Law Amendment Act has been very considerable, as compared with the year previous thereto. From the month of Aug. 1833 to Aug. 1834 the number certified by me was 360; but from Aug. 1834 to the present time I have certified nearly 750—being an increase of 390, or more than double the number certified in the previous year. Independently of which, I am happy to say that these Sos. appear to be founded on calculations more likely to enable them to fulfil their engagements with the members than those which were heretofore in existence; and this I attribute in a great measure to the rules and T. which have been printed by order of the Lords of the Treasury, and gratuitously distributed.

The Commissioners say that this increase of F. Sos. had been confidently anticipated as resulting from the change of law in regard to the poor. [POOR.]

There was this year founded "The Friendly Sos. Inst.—an Asso. for the Encouragement and Protection of F. Sos." The objects of the Asso. were stated to be :

1. To form a fund to assist members of F. Sos. at periods of unexpected distress, for which the rules of their respective Sos. may not provide sufficient means of relief.
2. To assist such Sos., the individual members thereof, or their representatives, in obtaining justice from whoever may in any way attempt to deprive them of their legal rights and privileges.
3. To advocate and promote the interests of F. Sos., either by legal assistance (to be paid for, if necessary, from the funds of the Asso.), by advice or by any other means that may appear to its managers most likely to attain these desirable objects.
4. To inquire into and investigate the laws and regulations of F. Sos.; to consider and suggest what improvements they are capable of receiving; to open communications with the various Sos. in the kingdom, and to collect and diffuse information on all subjects connected with their welfare.
5. To encourage and assist by every means (not pecuniary) the formation of F. Sos.
6. To form a library of such books, Acts of Parl., regis., and other publications as may be calculated to assist its members in carrying into effect the objects of the inst.

The Patron of the Asso. was Lord Brougham; the President B. Hawes, Esq., M.P. Mr. W. Baker and Mr. C. Reynolds were Hon. Secs. The "Address" of the Committee said :

Your Committee view F. Sos. as a great moral engine every way calculated to produce a virtuous, independent, and thriving pop.; they therefore consider it highly important to the country that these Sos. should every way be fostered and improved; begging at the same time to express their deep conviction that this inst. is every way qualified to spread the necessary information which F. Sos. require, to protect them from most of those evils to which they have been too long the helpless victims.

The idea appears to have been to found such an inst. as Mr. Ansell had recommended. 1836.—An attempt was made by Mr. Barlow Hoy, M.P., to obtain the appointment of a Select Parl. Committee to consider the question of F. Sos.; but he did not make out a sufficiently strong case.

There was pub.: *An Essay on the Means of Ins. against the Casualties of Sickness, Decrepitude, and Mort.*: comprising an article reprinted from "The Westminster Review" (No. xviii.) for April, 1828, with Additional Notes and Corrections. London. 8vo.

Mr. Samuel Gale pub.: *An Essay on Contingent and Eventual Losses, and on Ins. as a Means for their Indemnity*; wherein was included a very excellent chap. on F. Sos., and another on Provident Inst.

There was pub. by R. C. Norman: *A System of Accounts adapted to every Description of Benefit So., by which a plain Record of all Pecuniary Transactions is furnished on a Simple Arrangement.*

Also: *An Address to the Members of Benefit Sos. by the Founder of the St. Ann's Union.*

There was pub. (price 6d.): *Rules of the Community F. So., estab. for the Mut. Relief and Maintenance of the Members and their Families, in Sickness, Want of Employment, etc., upon the Principles of Co-operation.* Enrolled pursuant to Act of Parl.

There was also pub.: *Observations on the Principles of F. Sos.* A pamph. chiefly composed of selections from a larger work by C. Arnett.

In this year also there was founded: *The Friendly Sos. Advocate, and Journal of Useful Information for the Industrious Classes*; pub. monthly under the superintendence of the Committee of the F. Sos. Inst.

There was discussed this year before the Friendly Sos. Inst., at the Ship Tavern, Chandos Street, Covent Garden, the question, "Can any equitable plan be devised to prevent distressed members of F. Sos. from being excluded for nonpayment of their subs.?"

1837.—There were existing in Westminster at this date 40 F. Sos., of which 2 were exclusively for women, and 9 exclusively for men. The oldest of the sos., so far as could be judged by date of enrolment, only dated back to 1829. By far the greater proportion of the whole had been enrolled in 1831 and 1832. Vide *Parl. Return* of this year.

There was pub. this year: *Rules and Regulations of a Friendly Institution proposed to be estab. by the Right Hon. Peter Robert Drummond, Lord Willoughby de Eresby, for the Benefit of his Tenants and Labourers in the County of Lincoln.* Perth, 1837. 8vo.

There was also pub.: *The Benefit Sos. Almanack for 1837.*

Mr. Peter Watt, "Accountant in Edinburgh," pub. in that city *Progress and Present State of the Science of Life Ins.; with Thermometrical T.; and also Obs. on Health Ins., etc.* Under the last part of his title he reviews the data which had been obtained in regard to sickness, and from it draws the following practical conclusion :

An important fact elicited by the inquiries into the relative duration of Health and Sickness is this—that all *savings* from the earnings of labour ought to be made before the age of 55. Between the ages of 55 and 65 a man should not attempt to labour more than creates what is barely sufficient to maintain himself. After the age of 65 a man ought to cease from labour, and subsist entirely on previous savings. (p. 75.)

During this year there was founded the *Royal Oak F. So.* [not the Liverpool Burial So. popularly known by that name; nor the *Hearts of Oak* of 1841]. The So. is of the class called "general."

It had, in 1875, a total of 1922 members, with accumulated funds of £26,146.

During this year there was founded in Manchester the *Rational Sick and Burial Asso.*, which is usually ranked with the Affiliated Sos., although it is in constitution an Amalgamated one.

The So. is governed by a delegate meeting, formerly held once in 3 years, but afterwards on account of the expense made once in 5 years; there is power to call one oftener if needed. The So. is regis. as being located in Manchester; its branches not being regis.—they not being deemed separate Sos., as in the Affiliated Orders. This leads to inconvenience, as disputes with agents and others have all to be referred to Manchester, where alone the Justices have jurisdiction over its affairs. As a rule the bus. of the So. is transacted away from public-houses.

The bus. of each branch is conducted by a Sec. or agent who is appointed by the members of the branch, and who corresponds with the head office. The funds contributed belong to the whole So., and are remitted, after deducting expenses, to the head office, and form part of the common fund. The So. has not yet introduced a rule for the separation of the benefit fund from the man. expenses—which, including head office and agencies, have only amounted to about 11½ p.c. on the contributions. The Gen. Sec. is chosen by the votes of all the members, taken in their branches. He works under an Executive Committee chosen by the branches in and near Manchester. There is a safeguard in the case of the Gen. Sec. and Committee not working amicably—he can appeal to the whole body of members. Hitherto this government has worked well; in fact Mr. Stanley speaks of it as one of the best man. Sos. of the smaller Orders.

The So. has worked on a graduated scale of contributions since 1861; and is steadily improving its position; although it is still weighted with some of the old members who joined at inadequate rates.

At the close of 1871 the So. consisted of 14,134 members, and 103 widows, who are allowed, as in many Sos., to continue subs. and receive funeral money. Of the total members 149 were women, "*but the So. has long ceased to admit women on account of the cost they are to the So.; it being very difficult to check imposition by them; these 149 female members are therefore an inheritance of the past.*" There were 5754 members residing in *Devonshire*; 2253 in *Norfolk*; 2111 in *Suffolk*; 1437 in *Lancashire*; and so on through several other counties. There were only 74 in the whole of *Scot.*, and 5 in *Guernsey*. The new members of the year were 2088, against which 794 had been excluded for non-payment, leaving the gain on the year 1173. There were 247 branches. The accumulated funds were £26,608; and the average age of the members at end of 1870 was 30½ years.

The So. has in connexion with it a Juvenile and Adult Funeral Fund, with 8060 members (in 1871); and invested funds £5438 17s. 6d. This branch is worked by collectors at 15 p.c. commission. This frequently brings the agents for the So. in the district of their operations. The total cost of managing this branch, including the agent's 15 p.c., was 22 p.c.

At the end of 1875 the So. had 32,387 members, with assets £55,555.

There was an attempt made this year to estab. a So. in Lond. to consist alone of the Secretaries of F. Sos. and other Provident Asso., "the object of which will be, that in case of any imposition being practised on any So., information of the same be sent to the above So., when, if the same should be considered by the stewards necessary, a copy of the same be sent to each So. that the members of this may conduct." There was to be a small monthly contribution, sufficient to insure the payment of £10 for funeral expenses. We do not know if the asso. was actually formed.

1838.—Professor De Morgan pub. his *Essay on Prob.*, and therein (p. 297) he offered the following excellent obs. on F. Sos.:

The F. Sos., numerous as they are, are by no means universally distributed; and if they were, the smallness of their several amounts of investment must occasion the expenses of management to bear a larger proportion to the whole than would be the case if all were united. Besides which, it happens every now and then that the affairs of a So. fall into disorder from want of skill or care. The Gov. has lent considerable assistance by allowing their investments a higher rate of int. than could elsewhere be obtained; but this aid, independently of its being but little known by the class whom it most concerns, does not guar. the proper use of the funds so invested. If one large office were to be estab. in Lond., having the general management of the money raised, and the regulation of its distribution, it would not be difficult to find persons of station and character throughout the country who would consent to act as agents, receiving the contributions and certifying the claims. The expense of management might be borne for a few years by the public purse, and this burden might be gradually thrown on the estab. itself. No very great difficulties could arise in the formation of such an inst., and certainly none the expense of conquering which would not be trifling in comparison with the greatness of the object gained. *The Act which should estab. this universal F. So. would, in two generations, become the real Poor Law.*

Railway F. Sos.—There was this year founded the first of that now important series of *Railway F. Sos.*, viz. composed entirely of, and limited to, the members of the staff, officers and servants of the great railway cos. The So. regis. this year was the *Great Western Railway Provident So.*, now known as the *Great Western, Bristol and Exeter, and Metropolitan Railway Prov. So.* This So. had in 1875 some 6019 members, and an accumulated fund of £13,109. (See 1851, 1859, 1860.)

The Railway Sos. will be again referred to towards the close of this art.

There were existing in the borough of *Penzance* (Cornwall) this year some 20 F. Sos. Three of these had been estab. as early as 1768, the others at various periods since; but none of them had been enrolled until 1831 and subsequently.—See *Statist. Journ.* ii. 219.

1839.—The first Rep. of the Reg.-Gen. of E. and W. was pub. this year, and therein

were contained the following remarks upon the importance of the results of National Statistics in regard to Deaths, in relation to the operations of F. Sos.:

T. exhibiting the proportion of deaths at every successive year of age are among the most important materials from which are deduced the true principles on which should be founded the systems of Life Annu. and of Life Ins., and the Rules of F. Sos. estab. for the use of the poorer classes. The materials hitherto accessible are admitted to have been too limited for framing, satisfactorily, T. to regulate the amount of contribution at various ages, by which members of such Sos. may become entitled to allowances in old age, or to sums payable at death. The insufficiency of the data hitherto collected, and the contradictory nature of the several T. founded on them, are strongly set forth in the Rep. of the Select Committee of the House of Commons in 1827. . . It is there stated that, "according to the *Northampton T.*, out of 1000 persons existing at the age of 25, there survive at the age of 65, 343 persons. By the *Carlisle T.* no fewer than 513 persons will survive;" whereby it appears "that a So. which should adopt the *Northampton T.* would, if the mort. among its members should correspond with the *Carlisle T.*, have 3 annuitants where they had only calculated upon 2. Of those annuitants, moreover, a larger proportion would live to enjoy the annu. for a considerable number of years: for instance, of the 343 persons who would be annuitants according to the *Northampton T.*, 98 would live for 15 years; according to the *Carlisle T.* 162 persons would survive for that period, and attain the age of 80 years." . . In pursuance of these objects, I have felt that it was of great importance not only to give an abstract of the whole kingdom of E. and W.; but to exhibit the difference which prevails in the different portions of the kingdom; to compare town with country; agricultural districts with manufacturing and mining districts; the hilly with the low and level; the maritime with the inland; the eastern and northern with the western and the southern parts.

Rechabites.—The first distinct trace of this Order which we meet with is in the regis. of the "Tent of Jonadab" as located at the Mission Hall, Lower Rosamond Street, Clerkenwell. But it is generally understood that the Order had an existence in Manchester or the district at an earlier date. We place them here, chronologically, in the absence of more complete information.

Mr. Neison, sen., writing of this Order in 1845 (V. Statis., p. 138), said:

There is another class of so. which attempts to carry out the general principles of F. Sos.; but they are like the Odd Fellows Sos. [at that date] modelled after the very rudest shape in which benefit clubs were formed 50 years ago; and so far as relates to their contributions and benefits, almost nothing further is necessary to be stated. "Rechabite" is the name by which those Sos. are known; and every member has to come under an obligation to abstain from intoxicating liquors, and to discountenance by every lawful means in his power the drinking usages of society.

The rates of contribution then were: *entrance money*, ranging from 5s. at age 16 to £2 10s. at age 40; *monthly contributions* 1s. 4d., or 17s. 4d. p.a. The benefits promised were an allowance of 10s. p. week in sickness, and a deferred annu. of 5s. weekly after 70 years of age. Mr. Neison considered that to young members of 14 entering the "Tents," as the Lodges were called, the charge should be £1 2s. 8d. ann., and to members at 40, £2 10s. 9d.—allowing for entry money in each case.

About 1846 this Order, being desirous to regis. under the F. Sos. Acts, which it could not then do by reason of its constitution, caused to be brought into Parl. a Private Bill, incorp. certain provisions of the F. Sos. Acts, but giving themselves power to appoint delegates, and have movable committees; and also taking power for altering and amending their rules. It was brought in by Lord Duncan, and read a first time; but it was understood that the Home Office refused the assent of the Gov. to its further progress, and the Bill was dropped. The trouble with the "Chartists" at this period prob. had something to do with the refusal.

In 1856 there was regis. at Liverpool under the Friendly Sos. Acts the *Daughters of Rechabites Tent*.

In 1873 the *Salford Unity of Rechabites* numbered 17,715 members, of whom, however, 8706 were residing out of Eng.; but the British Isles accounted for 1725, *Ireland* for 365; the remainder in the *Australian and New Zealand colonies*. There were thus over 9000 left in Eng., with accumulated funds of £43,000. The Order excludes any member violating his pledge.

The returns sent in by the Tents are very inadequate. It is understood that some of the Lodges are very rich, having invested their money in Loan Sos. and made a large interest; while other Lodges by the same practice had lost much of their funds. The Order is considered not to be efficiently managed; there being no efficient audit of the Lodge accounts. Again, the management and sick fund are not kept distinct in many cases.

Many of the districts have separate *Funeral funds* amounting to considerable sums. There has more recently been founded a *Family Burial So.* in connexion with the Order, for which they employ collectors.

The Order has estab. a number of juvenile branches; and return in this connexion 5544 members.

The head office of the Order is in *Manchester*.

Engine Drivers F. So.—During this year there was founded at Birmingham, *The Locomotive Steam Enginemens and Firemen's F. So.* It is of the class of "Affiliated" Sos. Its first affiliation branch was estab. in Manchester, in 1841. It had in 1872 a total of 59 branches in union, besides a suspended one (Derby). The total number of members in union on 31 Dec. 1872, was 6632—being an increase of 251 during the year—besides 254 in the Derby branch. Its funds reached £38,216 19s. 3d. (exclusive of Derby with £1926 3s. 6d.)—being an increase during the year of £3062 18s. 5d. The "General and Superannuated Fund" stood at £9584 2s. 6d.—being an increase of £914 1s. 4½d.

Thus, in all, the funds amounted to £74s. 2d. per member, except in "rebellious" Derby, where the branch had £7 11s. 8d. per head.

The "General Fund" of the So., which is raised by quarterly contributions from the Branches, according to the decision of the General Committee, is under the management of the latter, and has for its objects the payment of death benefits (members and members' wives), travelling relief and "cases of emergency." There is also a "Pension Fund" for relief to members rendered unable by accident or otherwise to follow their usual employment. This is maintained by quarterly contributions of 1s. a member, plus one-half of the entrance fee; and a "Management Fund," maintained by a contribution of 2d. p. fortnight; both of which funds are also under the control of the Gen. Committee. The "Branch Funds," on the other hand, are under the control of the Branch Committees, and provide for allowances. The various accounts are kept separate; and the auditing of the Branch accounts is left to the Branches.

Branches in distress "through pressure of sickness" have a legal claim for assistance, which is rendered by the Gen. Committee by means of a levy of 1d. p. member on all Branches having £30 or more cap. The scale of sickness contribution is graduated into 4 periods, 18-25, 25-30, 30-35, and 35-40. The entrance fee at these periods varies from 5s. in the first to £2 14s. 6d. in the last. This graduation has been fixed by the members themselves.

The highest authority in the management of this So. is that of the "Assembly of Delegates," composed of a delegate from the Gen. Committee and one from each of the Branches. The element of "District" does not exist in this So. The Assembly of Delegates, too, instead of being ann., as in most of the Affiliated Sos., is only called together on the consent, or on the requirement of a majority of the Branches. The Assembly appoints a General Committee of not less than 5 (including 3 general trustees) to continue in office till the next Assembly; and it fills up any vacancies in its own numbers. The constitution of the So. thus resembles an Amalgamated Trades Union.

This So. must not be confounded with the *Locomotive Engineers and Firemen's F. So.* of 1854.

There were also founded this year (*inter alia*) the following F. Sos., all of which appear to have attained to a sound position.

1. The *United Kingdom*, a general F. So., which has been worked in a very careful and economic manner. It had in 1872 1388 members, with an accumulated fund of £7419. At the close of 1875 its return shows 1764 members, with accumulated funds reaching £13,156.

2. The *London Dock Friendly Institution*. This appears to have been a most flourishing inst. At the close of 1875 it was reported as having 559 members, with £40,654 in the shape of Accumulated Fund in hand. The number of members appears to be decreasing, and the fund increasing.

Regarding this So. Mr. A. G. Finlaison said before the Select Parl. Committee of 1849:

The Labourers of the *London Docks* have a So. which has been twice through our hands [Messrs. John and A. G. Finlaison] for the purpose of valuation; and on each occasion we have found the bal. in hand on each fund, such as the *Sickness Fund*, the *Annuity Fund*, and the *Burial Fund*, a small surplus sufficient to assure us not only that the So. is in perfect safety, but that our T. are as nearly as possible applicable to all cases [?] to their case].

There are several other F. Sos. in existence established by the employes of the Dock Cos. of London. (See 1840.)

3. The *Hotel Keepers' Provident Inst.* This at the close of 1875 had 80 members, with an accumulated fund of £5200.

4. The *Newsvendors' Benevolent and Provident Inst.* This appears to have been a successful So. At the close of 1875 it had 288 members, and an accumulated fund of £6274.

5. The *Artists' Amicable Fund*, which at the close of 1875 had 123 members, and a fund of £2862.

We see in these varied asso., as in many that precede and follow, how F. Sos. in various forms have been made to meet the wants of all classes.

1840.—The facilities afforded by the F. Sos. Act of 1829 had led to the estab. under its provisions of several mut. life offices. And when we remember that while the Legis. afforded no proper facilities for the estab. of legitimate asso. for bus. purposes, and the Law Courts hampered those which managed to get started with almost every conceivable obstruction, it is (as Mr. Bunyon has observed) a wonder that more of these were not originated. But even these facilities were now to be curtailed. The ins. sos. which had regis. under the F. Sos. Act were the following: *Clergy Mut.* (1829); *Friends Provident* (1832); *National Provident* (1835); *Temperance Provident* (1840); *Provident Clerks* (1840).

There was now enacted the 3 & 4 Vict. c. 73—*An Act to Explain and Amend the Acts relating to F. Sos.*—which enacted that the exemption from stamp duty should not extend to asso. insuring for sums exceeding £200 (sec. 1). Also that no So. insuring for more than that sum should be entitled to invest their funds in Savings Banks, or with the Commissioners of the National Debt (2). But Sos. exempted from preceding advantages

were to be allowed to issue *Nominee Pol.*, and to make the necessary changes in their regulations for this purpose (3). In future all Sos. making investments in Savings Banks, etc., to make declaration of not issuing pol. for above £200 (4). The Act to apply to the whole of the U. K. (6). [NOMINEE LIFE POL.] (See 1844.)

United Brothers.—There was this year founded in *Birmingham* the *Lodge of the United Brothers* bearing the number 47, indicating, we assume, that it was the 47th Lodge of this Order. We have no earlier reference. The Hon. E. L. Stanley, in his Rep. as Assistant Commissioner (under the F. Sos. Commission, 1870), pub. 1874, p. 182, says :

There are a set of Sos. in Birmingham and the neighbourhood called the *United Brothers* : there are nearly 100 Lodges, and 10,000 members. But they are not an Order : they have no distinct fund ; no gen. sec. ; no uniform rules. The only thing in common is one title and progressive numbers to the Sos. Very few of them are regis., but several have deposited their rules. They claim to be rich : one sec. of a Lodge of 150 members stated they were worth £10 a head ; and at the public-house where his Lodge met he said there were 3 Lodges of U. B. numbering 500 members—one as rich as his ; and the other still richer : having invested its money in a Loan So. They have Lodge liquor 2d. a member a night. One of these Sos.—the U. B. No. 4—returns to the Registrar 188 members, £8286.

This year there was founded another *Burial So.* known as the *Liverpool United Legal Friendly Burial So.* ; it is however usually known as the *Royal Oak So.*, “having grown (says Mr. Stanley, Rep. 1874, p. 30) out of an old public-house Burial Club that used to meet at the Royal Oak.” It purports to have been established pursuant to Act of Parl.

Mr. Wm. Jenkins, the then Sec. of this So., was called before the Parl. Committee on F. Sos. in 1849, and gave many details regarding this and other Burial Sos. of that period.

The So. claimed to have in 1867 some 59,644 members.

In 1868 the So. spent £170 in promoting petitions against Lord Lichfield's Bill, then before Parl.

In 1871 the So. had about 50,000 mem., with an accumulated fund of £15,072 8s. 4d.

Mr. Stanley, in his Rep. 1874 (p. 31), gives the following details regarding the So., based upon the evidence taken before the Royal Commission on F. Sos. 1870 :

This So. has gone through evil days, and about 16 years ago went through an exposure similar to that of the St. Patrick's So. under Treacy . . . [See 1832.] Protracted litigation failed to deprive these men of their places ; and they or their children and friends have continued in office ever since, paying off their debts by degrees. The cost of man. of this So. is very nearly 50 p.c., and sometimes exceeds it. There is no separation of accounts ; no proper audit. The rules are vague. . . . At one time the So. had a Sec., Mr. Greenwood, who endeavoured to introduce reforms ; but soon found out that he had reckoned without the collectors, and he was quietly put out of office. . . . This So. has reduced its benefits to members, whilst it has squandered the contributions in excessive salaries.

This is altogether a different So. from the *Hearts of Oak*. See 1841.

There was also founded : 1. The *East and West India Dock Provident So.* Mr. A. H. Bailey, in his evidence before the F. Sos. Commission, 1870, spoke of this as “a very good So.” It started with between 400 and 500 members ; but in 1872 had 1027 members, and a fund of £5652. At the close of 1875 the So. had 1414 members, and £6785 accumulated.

2. The *Stationers' and Papermakers' Provident So.* The operations of this So. appear to have been successful. At the close of 1875 it had 184 members, with funds in hand amounting to £28,444.

1841.—There were existing at this date in the district of Trevethin (*Pontypool*), South Wales, and in the neighbouring works of Blaenavon, Monmouthshire, 44 F. Sos., of which 37 were men's clubs, having 5003 members ; and 7 for women, having 779 members. But while the total number of members was thus stated at 5782, it was found that many belonged to 2 or 3 clubs ; and after making these deductions, it was believed that there were 4700 members—a very large proportion of the entire pop. Most of these clubs held their meetings at public-houses ; but the Varteg club with 1360 members (belonging exclusively to the Varteg works) held their meetings at the Temperance Coffee-house ; and the example was about to be followed by others.

In *Kingston-upon-Hull*, this year, there were found to be 1645 heads of families among the working classes who belonged to F. Sos. Many who did not then belong stated that they had done so, but the clubs from various causes had been broken up. (See 1795.)

At *Portsmouth* at this date there were 19 F. Sos., but none of them had been enrolled further back than 1836. Among these were the *Royal Marine Sergeants' Death and Discharge So.*, and the *Hebrew Benevolent So.*, both enrolled 1837.

This year there was founded the *Hearts of Oak F. So.*, intended to be “general” in its operations. It included in its scheme not only sickness ins., but also fire ins., and compensation during imprisonment for debt. The only fixed contribution covered the sickness allowance and cost of management. For the other benefits quarterly levies were made, varying with the demands on the funds. The operations of the fire ins. benefit will be specially spoken of. The So. has several other especial features :

1. No member can be admitted unless he receives an average wage of not less than 22s. p. week—thus the ordinary labourer is excluded ; and the rules contain a long list of excluded trades, ending with the words, “or any other occupation which the Committee may conceive dangerous or injurious to health.” No member is admitted over age 36. The So. thus, in a certain sense, consists of picked members. The scale of sickness con-

tribution is uniform at all ages. The entrance fee is 2s. 6d. up to 32; and 3s. 6d. from thence to 36. The ages of the members are very uniform.

2. The So. is parcelled out into divisions of 1000 members each; but at the ann. meeting held at Exeter Hall, arrangements are made in view of 2000 members attending.

3. The affairs of the So. are managed by a Committee of 40 members chosen in the following manner: 10 are elected every 3 months (at the quarterly meetings) and 10 go out of office every 3 months, leaving 40 always sitting.

The expenses of man. are very moderate, prob. not exceeding $7\frac{1}{2}$ p.c. on the income. The progress of the So. in its later years is shown in the following figures:

Years.	Members.	Ann. Income.	Accumulated Fund.		
		£	£	s.	d.
1866	.....	24,033	44,386	2	5
1868	.....	30,249	54,525	15	11
1870	.....	40,751	67,321	9	5
1872	32,837	60,317	93,839	17	8

This So. adopted the system of insuring its members against loss by fire to an amount not exceeding £15. It paid in the 20 years 1842-62 a total of 147 fire claims, amounting to £886 1s. 2d., averaging £6 os. 6½d. each. In 1862 the So. had 9040 members, and therefore stood upon a fire risk of £135,600. The claims for the 10 months from 1 March 1861 to 31 Jan. 1862 were 16 in number, for a total of £101 11s. 7d., averaging £5 1s. 11d. each; none reached the full guaranteed amount of £15. The prem. charged to the members amounted to about 2¾d. p.a., being at the rate of 1s. 6½d. p. £100 p.a. The results of the operations of this So. have been rather more favourable than those of the *Royal Standard*. (See 1828.)

The So. has passed through some phases of bad man.; but is now understood to be well conducted. The Commissioners of 1870, in their 4th Rep. p. xlvii, speak well of it. A valuation of its affairs is now being made by a most competent actuary.

We find an *Amicable Hearts of Oak F. So.* was regis. at Prescott, in Lancashire, in 1810.

There was founded in *Birmingham*, this year, the *Cannon Street Adult Male Provident Inst.* It appears to have looked for its members to the various religious bodies of the town. [See 1833.] The So. has been gradually increasing in members and funds from the commencement.

The T. of contributions are graduated according to age at entrance; and insurances can be effected for sums varying from 4s. a week to 20s. in sickness. The average is 12s. a week. Certain trades are excluded.

Medical attendance is provided for all who live within 3 miles of the Birmingham Town Hall; and 3s. is applied from each member's contribution for securing this benefit.

The *funeral benefit* is £5 after 6 months' membership; £20 after 12 months. On the death of a member's wife £8 is paid on account of this benefit. This is provided for by a special levy, which has been steadily, but not uniformly, increasing. In 1860 it was 2s. 1d.; 1861, 3s. 3d.; 1862, 4s. 6d.; 1863, 4s. 2d.; 1864, 5s.; 1865, 5s. 6d.; 1870, 4s. 3d.; 1871, 4s. 9d.

The man. is paid for by the *proposition* fees, admission fees, and fines. It is very moderate. In 1871 it was £658 (including £95 for valuation), being 5'35 p.c. on contributions, fines and levies. This is very much less than in some of the large Lond. Sos.

In 1871 it was resolved to have a periodical valuation of the affairs of the So. Mr. Neison, jun., was called in. His valuation showed a deficiency of £21,244: viz. assets, £207,940; liabilities, £229,184—deficiency over 10 p.c. This was attributed partly to an insufficient rate of contribution for the younger members; partly from the 3s. per member taken from the sickness fund, and for *medical* benefit (the rules had provided for 2s. 2d.), and partly to a higher sickness experience than the average. The actuary recommended a slightly increased rate of contribution, and a better investment of funds, as likely to cure the evils existing. The So. had realized £3 13s. p.c. on its funds. The valuation was made at 3 p.c. If the valuation had been made at the rate of int. actually realized, the deficiency would have been reduced to £5968.

The members, instead of thanking Mr. Neison, as they ought to have done, for his frankness and care, took great offence. The meeting at the town hall was very stormy, and there was much correspondence in the local newspapers. The members had expected a surplus, and a bonus. The truth was disappointing; but has prob. saved the So.

In 1872 the So. had 7651 members, and funds amounting to £47,734. At the close of 1875 the So. had 8347 members, and an accumulated fund of £66,780.

This is the largest F. So. connected with the religious bodies in Birmingham.

1842.—This year there was founded in Worcestershire the *Stewpony Becher Club*. It is not entirely local in its operation. It was founded, as its name indicates, upon Mr. Becher's plan; but his rates have since been abandoned as being too low. Mr. Finlaison's were adopted.

Members can subscribe for sick pay up to 10s. per week. The sick allowance continues up to 60, 65, and 70 (according to contribution), and then an annuity of one-half.

The rules require a quinquennial valuation of the position of the So. The valuation of 1858 resulted in a surplus of £406 13s. 3d. being divided among the members; in 1863 the divisible surplus was £392 3s. 2d.; in 1868, £591 16s. 11d. This valuation, made up to the close of 1867, gave assets £8528; liabilities £6536—surplus £1992. The So. invests its funds with the Commissioners for the Reduction of the National Debt.

The balance-sheet of the So. shows its progress from the commencement.

In 1872 there were 256 members, 229 males and 27 females. There were among the members 50 agricultural labourers, 3 miners, 7 glassworkers, 30 in ironworks, and 139 in other trades.

We give the position of this So., the head office of which is in Stourbridge, for the purpose of showing the success which may attend even small sos. when carefully and discreetly managed.

1843.—In the *Report*, etc., upon Gilds, pub. in Edin. by Bishop Gillis this year, there is an important Appendix, wherein is contained much information regarding Gilds and F. Sos. The Ed. says:

The object of the F. Sos. of Scot. and of the Benevolent Sos. of Eng. was that of health ins. schemes, viz. to provide relief in the event of incapacity for labour; as life ins. provide for persons dependent on others whose professional or other incomes terminate on their death—life ins. depending mainly on the rate of mort., while health ins. depends on the rate of mort. and the rate of sickness combined. . . .

One great difficulty, however, stood long in the way of any successful attempts to improve those Sos., from their very natural reluctance to give publicity to their transactions. A knowledge of the rate of sickness among their members, as ascertained by their own experience, was necessary for a just computation of a F. So. scheme; but this information was for a very considerable time withheld by the very persons most interested in affording it. . . .

The ed., after reviewing the main facts connected with the compilation of the Highland So.'s T., proceeds to give a "Summary of the Revised Rules of the Holy Gild of St. Joseph, in as far as they relate to the pecuniary contributions of the ordinary members." This Gild comprised the 3 following schemes:

1. A Sickness Fund, for providing weekly payments in money during sickness, until the members complete the 65th year of their age.
2. An Annuity Fund, for providing a permanent ann. allowance for members for life, after completing the 65th year of their age.
3. A Life Assu. Fund, for providing a sum payable at the death of members.

Each of the above-mentioned schemes is divided into shares. Persons entering the Sickness Fund *must* take at least one share in the Annu. Fund. But members may hold shares in the Life Assu. or Annu. Funds, either together or separately, without holding shares in the Sickness Fund. The benefits of each fund might be secured either by a single payment on admission or by ann. or monthly contributions in advance; these being redeemable, or reducible at any time at will of member. Members withdrawing at any time receiving two-thirds of the value of their interest in the Gild at the time of withdrawal. Members admissible to Sickness and Annuity Fund from 20 to 50 years of age; and to the Mortuary or Life Assu. Fund up to 70. Persons under 21 might be admitted on paying half contributions and receiving half benefits. Women not admissible.

Nottingham Unity of Odd Fellows.—There was founded in or about this year the *Nottingham Ancient Imperial United Order of Odd Fellows*. This was an offshoot from the Manchester Order, resulting from the events detailed in our hist. of the Order at this date.

The details regarding this Order are very meagre. It was reported to Mr. Stanley, Assistant Commissioner, 1870, that they had no return of the members, nor of the finances; but that they estimated their numbers at 40,000, with 574 Lodges. About 22,000 members belonged to the general funeral fund at *Nottingham*. There were no Districts in the sense in which the word is understood in the other Orders, viz. as bodies for the payment of death benefit, and as exercising a supervision over Lodges. But there are Provincial Chapters and Grand Lodges.

The Grand Lodge fills up its own vacancies. In practice the Grand Lodge is composed of the officers of the Lodges in and about Nottingham. The funeral fund and other general funds being also managed at Nottingham gives the ordinary members at a distance very little voice in the affairs. The Order is consequently, as a rule, limited to the Midland Counties. There are about 120 Lodges in Nottinghamshire; some 47 in Derbyshire; about 56 in Leicestershire; more than 40 in Lincolnshire; and nearly 40 in Northamptonshire; nearly 30 in Lancashire; more than 40 in Yorkshire; 20 in and near London; 30 in Staffordshire, and 30 in Warwickshire. The Lodges average about 70 members each. There is one Lodge at *Calais*, but very few Frenchmen are members of it.

A law was passed in 1871 requiring all Lodges either to register or to deposit their rules. A large proportion of the Lodges are regis.; but the Act is not observed as a rule; and there is no external control, or independent audit of their accounts.

There is no law requiring a graduated scale of contributions; nor does the Order take steps to require a separation of the management from the benefit fund.

In 1873 a law was passed requiring the Lodges to fill up all returns which the Grand

Lodge may require. There are signs in this and other ways of improved management. But not having District meetings prob. leads to want of enthusiasm.

About half the Lodges near Nottingham have Lodge liquor from 1½ to 2d. a night. This is also done by some of the regis. Lodges. Most of the Lodges have anniversaries; but the attendance is not compulsory; and no part of the expenses comes out of the funds.

The *British Odd Fellows* are a split from this Order.

About 800 of the members are found to relinquish membership annually.

This Order emulates the Manchester Unity as regards *Literature*: for it has an *Odd Fellows Journal, or Miscellany of Intelligence for the Members of the Nottingham A. I. U.* It also has a *Quarterly Mag.* These are both pub. in Nottingham.

United Patriots.—There was founded the *United Patriots National Benefit So.*, 64, Lamb's Conduit Street, London. The management of the So. is by a Committee elected yearly. Its members meet once a fortnight, and receive 2s. for each attendance. The So. employs agents for collecting: these were paid 10 p.c. commission; they are now paid 5 p.c. only.

The So. in its earlier years suffered a good deal from embezzlement. In 1857 it started clear, writing off all losses, with an accumulated fund of £1900.

In 1870 the income from contributions was £9490; the cost of management 12½ p.c. The number of members was then over 7000; but 445, or more than 6 p.c., allowed their contributions to lapse. *The Sec. states that the average period of membership is not over 1 year.* (Stanley's Rep., 1874, p. 135.)

In 1875 the So. had 10,051 members, with an accumulated fund of £18,967. There has been no actuarial valuation.

This year there was founded another *Burial So.*, which now occupies the second position in this class as regards number of members, viz. the *Liverpool Victoria Legal*, which, at the end of 1872, was reputed to have 200,000 members, and accumulated funds of about 50,000.

This So. was some years since the victim to a characteristic fraud. A discontented manager, aided by a collector in Birmingham, conceived the idea of regis. a F. So. as the *Victoria Legal F. So.*—this, the parent So. being then unregis. Having got this duplicate organization into force, they transferred the unconscious members of the Birmingham District by thousands. The fraud being discovered, meetings were held, the circumstances stated, and finally, by way of compromise, the local man. returned to his allegiance, and many of the former members were reinstated. "The others trusted to their collector, whose power is very great with ignorant persons, and adhered to the new So. After some years, Davis finding that he could not carry on his bus., sold out to the *Royal London So.*, and trans. several thousands of members to them."—*Rep. of Hon. Mr. Stanley*, 1874, p. 29.

1844.—The provisions of the Joint-Stock Cos. Registration Act—7 & 8 Vict. c. 110—enacted this year, were made to apply to all F. Sos. which granted life pol. for sums exceeding £200. Several of the mut. life offices, already named, regis. under this Act; but continued to issue pol. below £200 under the powers conferred upon them by the F. Sos. Acts. This led to complications, and to further legis. in 1846.

Mr. William Spens, then Manager of the *Scottish Amicable*, read before the Glasgow Philosophical So. a paper: *Hints for the Formation of a F. So. for the Professional and Mercantile Classes.* This paper was afterwards pub.

The author says in his preface:

There is no new feature in this, except that, while in the generality of F. Sos. temporary sickness is the main thing for which provision is made, in this So. it is only proposed to provide for permanent incapacity and superannuation. The advantage of such a species of ins. for the class for whom it is intended can scarcely be doubted; the only objection in carrying out the details would be in defining permanent incapacity, which, it will be observed, it is proposed to determine rather by the decision of a tribunal to be fixed, than the definition of special causes.

This question will be further discussed under HEALTH INS.

There was pub. in *Bodmin* by Rev. Richard Seymour, M.A.: *Old and New F. Sos.: Comparison between them; with an Account of the Becher and Victoria Clubs, as estab. at Stratford-on-Avon and Alcester, in Warwickshire.* (2nd ed.) There is nothing in this requiring comment here.

Same year, Mr. W. J. Woollgar, F.R.A.S., pub.: *F. Sos. Security: An Essay on Testing the Condition of a F. So. by Valuation of all Pol. at Ann. or other Short Periods, without resorting to a Professional Actuary. Also Obs. on the Rates of Contribution, and an entirely New Series of Elementary Calculations applicable thereto; and other Practical Points connected with such Sos.* This is a most interesting and valuable pamph.

There was this year founded another *Burial So.* which has attained some notoriety—the *Loyal Philanthropic F. So. of Liverpool*.

In 1870 the So. had 44,000 members, an income of £12,016, and an accumulated fund of £16,000.

"This So. makes a show of keeping a separate man. account; but the show is worthless—for after spending the per-centage allowed, the officers take as much more as they want."—*Vide Mr. Stanley's Rep.* 1874, p. 31, from which also is the following:

Some years ago in this So. there was a battle royal between two factions of collectors, and their

partizans, at the ann. meeting of the So. The object of the strife being the offices with their emoluments, the two sides came prepared with distinctive colours and badges, to fight it out. The present Committee were victorious, and have since ruled in peace, and have expended their 40 p.c. in the man. as they pleased.

It was given in evidence before the F. Sos. Commission, 1870 [2nd Rep. p. 584], that Mr. John Lawrence, one of the collectors of this So., seceded from it, and founded the *Royal Liver So.*

1846.—Mr. F. G. P. Neison read before the Statistical So. of London a paper: *Contributions to Vital Statis., especially designed to elucidate the Rate of Mort., the Laws of Sickness, and the Influences of Trade and Locality on Health; derived from an extensive Collection of Original Data supplied by F. Sos., and proving their too frequent Instability.* This paper is pub. in *Journ. of Statis. So.*, vol. viii. p. 290. But it was also pub. in a revised form, and with a slightly altered title, as an independent work, the same year: *Contributions to Vital Statis.: being a Development of the Rate of Mort. and the Laws of Sickness; from original and extensive Data procured from F. Sos.; showing the Instability of Friendly Sos., "Odd Fellows," "Rechabites," etc.; with an Inquiry into the Influence of Locality upon Health;* and it is this ed. that we now propose to review.

Mr. Neison obtained a large mass of data from two sources—1. From the quinquennial returns of F. Sos. 2. From voluntary returns, chiefly from the Friendly Sos. in Scotland. He arranged the data so obtained under three principal heads, in order to show the mort. and sickness—1. In the *Rural Districts.* 2. In the *Town Districts.* 3. In the *City Districts.* The combined results were also dealt with, and brought into comparison with the general mort. of the kingdom as shown in Mr. Neison's T., already given under ENGLISH LIFE T. at this date. It is sufficient to state the short results here: the details will be given under F. SOS., MORT. AND SICKNESS EXPERIENCE OF. Speaking first as to the *Mortality*, the short result is that the members of the F. Sos. under obs. presented a more favourable expec. of life than that shown by any Mort. T. in existence at this date, including *Finlaison's Gov. Annuitants T.* This was a matter of much surprise, and gave rise to many suppositions, which will be presented in their proper place. On the other hand, the amount of *Sickness* shown to be experienced by the members of the Sos. under investigation was far greater than any previously deduced. Mr. Neison, commenting on these and other incidents brought to light in his investigation, says:

Considering the immense number of these Sos. which have broken down, it is lamentable to think that so little should have been done to ascertain the real nature and extent of the risks to which they are subject. It is still more remarkable that so many legislative enactments should have occupied the attention of the Gov. of the country from time to time; and that Committees also of the House of Commons should have had the condition of these Sos. for several years under consideration without any practical measure being carried out for collecting and arranging data in a proper shape, to point out the true character of the liabilities to which they are subject. In fact, the stimulus given to the formation of these Sos. by some recent Acts of Parl. should be regarded as an evil rather than as a benefit to the working classes. An immense number of Sos. were formed in a very short period, and their contributions regulated by the most delusive and inadequate data, so that *at the present time very few are to be found calculated to survive many years.* Under a scientific and amply developed system, these Sos. would be calculated, in a few years, to completely remove the cause of nearly all that poverty, distress, and misery which haunt our manufacturing towns, and fill our workhouses with the working classes of the country; but owing to the imperfect and unstable foundation on which they are at present built, instead of being a help and a support to a poor man, they involve him in those difficulties for which he might otherwise have provided. On becoming a member of such a So., he reasonably looks forward to it as a support for his declining years, and a protection during periods of sickness and disease; but ultimately, at the very time when assistance is required, he discovers that the So. has been formed on a ruinous plan; that the increasing years and infirmities of its members have absorbed all its funds, and that those surviving must be thrown destitute on the parish as a public charity. It is thus, by the most ill conceived of all proceedings, the legis. of the Gov. has tended. Every facility and encouragement are given to the formation of Sos., without any help or information for their man. or guidance. The ship is cast upon the waves without a rudder or a compass, and the safety of the vessel left to accident and chance.

As stated, a Committee of the House of Commons reported in 1825 unfavourably of the T. of sickness furnished in the preceding year by the Highland So.; still no other data were supplied on which any more confidence could be placed: the consequence was that Sos. were formed, and continued to be managed, on calculations resulting from the same data; and even up till the present time, thousands of those Sos. are conducted either on those terms, or terms still less adequate to carry out the purposes contemplated.

There are many other errors in the rules of F. Sos. connected with the various benefits which they hold out, calculated to ruin their schemes.

While other writers had predicted [*vide* Mr. Milne in 1827, and Mr. Finlaison in 1833], Mr. Neison was the first to demonstrate that the quantity of sickness experienced was modified by circumstances of *Locality and Occupation.* Under F. SOS., MORT. AND SICKNESS EXPERIENCE OF, this will be made apparent. We may here present some of his general observations thereon:

It has been shown that particular trades and employments are subject to different degrees of sickness and mort., and the importance of this element in considering the health of towns, and the influence of locality on the duration of life, has already been pointed out [LOCALITY] [OCCUPATIONS]; but in viewing the condition of F. Sos., the necessity of considering the peculiar effect of certain trades and occupations must appear to be of vital importance. A most remarkable disparity exists between the rates of sickness prevalent in different places and in different employments, and Sos. may run the greatest hazard by incautiously adopting each other's regulations or T.: *for so great is the distinction which obtains between the liabilities incurred from members of different trades, that what would be sufficiently safe for one So. might completely ruin another.*

The practical advantage of thus recognizing particular districts and occupations is obvious.

Hence the reason why some F. Sos. go on prospering, while others, under apparently the same management and scheme, survive but for a short term of years, to ultimately involve their members, when most in need of support, in ruin.

On the general subject of his inquiry, Mr. Neison remarks: One of the difficulties in the way of obtaining information was the fear, on the part of the members, that its publication might prove hurtful to particular Sos.; and it was therefore necessary to come under a promise that whatever use was made of the information, no individual So. would be referred to. But that a general idea may be formed of the condition of F. Sos., in respect to the adequacy of their contributions for the benefits held out by them, 50 Sos. have been selected at random; and in order to make the illustration more simple, one period of life only, age 35, has been fixed on, and the rates in each of the 50 Sos. in question examined and graduated to represent an allowance of £1 p. week during sickness up till age 70—an annu. of £13 p.a. for life after 70—and a sum of £10 payable at death, whenever that may happen. The corresponding rates having been determined in each So. for the above scale, they were found to average only £1 11s. 5d.; but in many of the Sos. an entry-money is paid, and for the same age it was found to average £1 2s. 9d. As the value of the temporary annu. at the same time of life is 17'88172, the above entry-money will be equivalent to an ann. contribution of about 1s. 3d., which added to the other item will render the whole ann. contribution £1 12s. 8d. He proceeds:

The entire inadequacy of such a contribution to provide for the benefits offered must be apparent: p. 121 will show that for the single benefit of £1 weekly, during sickness, the ann. contribution should be £2 10s. 5½d.; and on an examination of the respective T., it will be seen that the contribution adequate to provide for the 3 benefits offered is £3 9s. 8d. ann., or more than double the actual amount collected. It is a most lamentable condition in which to find Sos. aiming at designs so benevolent and praiseworthy. It may seem strange that they should endure for even a year or two; but if the amount of sickness at p. 98 be examined, and the young period of life at which members generally enter borne in mind, it will appear that they may survive at least 25 or 30 years before their insecurity may become evident to an ordinary observer. Members are generally satisfied in the first periods of a So. to find that the income has exceeded the expenditure, and left a respectable balance; losing sight of the great accumulations which are necessary to meet the future liabilities incidental to their increasing years and infirmities. As a So. advances, its income will invariably, in connexion with a given number of members entering at a particular age, decrease with the increase of its expenditure. Suppose a So. to commence with a given number of members, all 35 years of age—in 25 years afterwards the income from those members, through the deaths that take place in that period, will have decreased to seven-tenths of its orig. amount; while its expenditure on sickness will have trebled, and the members fast approaching a time of life at which the expenditure will be ten times the orig. sum. This is a state of things for which the contributions of a So. should make ample provision; but, unfortunately, few have so considered the subject as to protect themselves against such vicissitudes.

But he suggested that perhaps the most simple and correct mode of looking at the liabilities of these Sos. was to consider the most improved class of them, in which separate contributions were made for each benefit offered; and for this purpose contributions answering to age 35 would alone be spoken of. "A distinction in the contributions for the various benefits offered is a valuable improvement in the man. of such Sos.; and accordingly collateral improvements do also progress with it—for in this class of Sos. it is found that the ann. contribution for a sickness benefit only is nearly equal to that of the other group of Sos. referred to for the whole 3 benefits." To secure £1 p. week during sickness, the contribution is £1 10s. 10d. yearly, which is only 1s. 10d. less than the yearly contribution in the other Sos. for all the benefits combined; but it has already been shown that the real risk incurred from sickness would, from members entering at age 35, require a payment of £2 7s. 9½d. ann. Mr. Neison adds: No doubt many Sos. are on a much better foundation than the above statement would seem to indicate; but it was thought the better course to refer to the Sos. as a class. A subdivision of the same group was found in a better condition, and the ann. payment was about £2 for £1 p. week sickness. No So. had its sickness contributions equal to the rates indicated by Mr. Neison's T. pub. in this work. "The necessity for a general revision of the sickness rates and contributions was therefore obvious."

With respect, however, to those Sos. distinguishing the rates of contribution for sums of money payable at death, "or what is generally termed assu. at death," a better state of things was found to exist. The contribution on the average of those Sos. was 4s. 7d. ann. for £10 payable at death, while the exact risk, according to Mr. Neison's own T., required a payment of 4s. 4d. This latter sum did not indeed include anything for expenses of man. "If it were the practice for those Sos. to keep distinct funds for each of the benefits offered, and never to allow the contributions for assu. at death to be mixed up with the moneys arising from other sources, little danger need be feared by those making a provision for death; but unfortunately such a separation of the funds is rarely observed, and the general result is that the assu. fund is absorbed by the deficiencies in the other bus. of the So." It is added, "that although the preceding sum is quite adequate to meet the contingencies from death on the average of all Sos., yet there are Sos. in particular localities, the members of which follow unhealthy occupations, and such a sum would not in those instances be sufficient to meet all the liabilities from death."

The most remarkable deficiency observed among even those Sos. having graduated rates as well as distinct contributions for the various benefits offered was in the contributions which provided for an *Annuity* on attaining a given age. The ann. contribution at age 35 for an annu. of £13 a year after attaining the age of 70 was found by Mr.

Neison to be 18s. 10d.; but the rate in some Sos. was as low as 8s. 11d.; and an average of the number of the best Sos. gave 12s. 2½d.—while the most favourable rate in an individual So. in the same group was 14s. 4½d.!

Another feature he remarks upon in F. Sos., particularly in the older class of them, was a want of graduation in the premis. or rates of contribution. "This feature, although generally associated with inadequate rates, is not of itself evidence of instability, but is rather a principle which is non-equitable to the members. The better constituted F. Sos. have long discontinued such a plan, and have now T. graduated according to age; but as there are still many Sos. not so improved, it is proposed to introduce a few ols. on the nature of this error, which is most strikingly developed in the management of Odd Fellows Sos."

Mr. Neison's remarks regarding the Odd Fellows and some other Orders have been already dealt with in our history of those Orders. The discussion which resulted out of doors will be dealt with in its chronological sequence.

In dismissing this work for the moment, we may say of it, in reference to the present and subsequent editions [see 1857], that it stands prominently forward, among the many works on F. Sos., as a monument of well-intentioned labour, which the author lived to see produce results of the very highest character in reference to the industrial classes of this empire.

During this year also Mr. Neison pub.: *Observations on the Manchester Unity of the Independent Order of Odd Fellows, in a Letter to the Ed. of the "Kilmarnock Herald,"* Oct. 28, 1845. The origin of which was as follows: Some of the members of the Kilmarnock Lodge of Odd Fellows took umbrage at some of the statements contained in the work of Mr. Neison last reviewed, and charged him with making his statements on incomplete data and insufficient grounds. A more complete and crushing reply than that contained in this pamph. was never made on any question. Its statements regarding the Independent Order of Odd Fellows we have already made use of in our hist. of that Order (see 1812); but the pamph. gives us some details regarding the author's larger work of this year which are not to be obtained from that work itself.

The investigation of the data for that work had extended "over a period of 4 years of incessant and laborious calculation, at an expense of about £3000."

Again, as to the supposed defective character of the data, I believe I shall be able to show you that the very greatest care has been taken to exclude every source or element of error; and perhaps on no other occasion has the same amount of caution been exercised on the various details of an inquiry into V. Statis. On the various schedules on which the elementary facts of the inquiry were written being procured from the different Sos., they were submitted to the individual scrutiny of four of perhaps the greatest authorities in this country on V. Statis.—Mr. [now Dr.] Farr of the Reg.-Gen. Office; Mr. Fletcher Hon. Sec. to the Statistical So.; Dr. Guy of King's College; and Mr. Phillips of the Westminster Hospital. Every schedule upon which the least suspicion attached, or on which any of the elementary facts were deficient, was immediately rejected; and nothing but the most satisfactory records were admitted as a portion of the orig. data. . . . When all the schedules were fully prepared, they were abstracted by one of the most refined analytical methods ever adopted in connexion with V. Statis., in order to exclude every foreign element, and to exhibit pure results, undisturbed by any influencing causes arising from aggregate combinations or general averages. . . . The whole spirit, aim and obvious intention and fact of my book, is to avoid and disprove the fallacious tendency of any method of general averaging. . . .

It appears that it had been the intention of the Council of the London Statis. So. to make inquiry into, and report upon the mort. and sickness experience of F. Sos.; and in the Rep. of that So. for the present year there occurs the following passage:

The Committee appointed by the Council to investigate the evidence which may be obtained from the experience of Benefit Sos. towards an elucidation of the laws of sickness as well as mort., have delayed to make any local efforts, until the results of the labours of an individual Fellow of this So. should be laid before it. This gentleman, Mr. F. G. P. Neison, Act. of the *Medical Invalid and Gen. Life Assu. So.*, by a system of rewards for the best returns from Benefit Sos., has procured an unrivalled mass of materials; and by the most laborious and legitimate processes has obtained results of great importance and interest, which he is prepared to lay before you.

They were so brought before the members of this most useful So., as we have seen, previously to being pub. in an independent form.

But the most important information conveyed was that relating to the data on which the T. therein contained were founded. Returns were obtained from 408 towns in E. and W. and from 37 towns and districts in Scot., "and in some of those places there were from 10 to 20 Sos.; so that returns were obtained from above 4000, and comprehending 1,217,685 years of life, and representing 2,418,693 weeks of sickness—being the largest amount of exact information ever brought forward on the same subject." (p. 6.)

Mr. Neison said in his evidence before the Lords Committee (1848) regarding this pamph.:

I ought to mention that all documents pub. by the Odd Fellows So. are *secret documents*; in fact it is difficult for the people to get hold of them; however, I was permitted to see a most important document giving the results of sickness and mort. for the year 1844 of the Odd Fellows So. And in order to be able to make a proper reply from the experience of the Odd Fellows themselves, my own evidence being drawn from different sources, I abstracted the returns of sickness and mort. furnished by the Order, and the results confirmed the laws developed in the *Contributions to V. S.*, or orig. pub. Seeing the tone in which the Odd Fellows were treating the question in their publications, I chose to distribute 1000 copies of my reply to the Kilmarnock district gratis. I sent 700 of them to that district, and 250 I sent to what is called the Board of Odd Fellows—the governing body at Manchester. They wrote through a gentleman with whom I am connected, and who is himself I believe an Odd

Fellow, wishing that I would sell the Manchester Board a few copies. In order, however, to get out of the pecuniary interest which I was afraid might attach to it, I said that I was unwilling to offer for sale the pamph., and had therefore ordered the printer to break up the type, but that I would countermand that order, and if they would make terms with the printer for a few copies, they might do so. I liked the spirit in which the Board seemed to act; and they purchased I believe 4000 copies from the printer, which enabled them to send a copy to each lodge or district. Finding a further demand for the pamph., it was somewhat altered and enlarged, and then pub. in a cheap form, barely paying the expenses of printing; and the Odd Fellows have very largely availed themselves of the publication. And the result is on the whole most gratifying to me, inasmuch as many [of the lodges] have attempted to enrol themselves, while others have actually enrolled themselves under the F. Sos. Act.

Mr. Neison, later in the same year, pub.: *Observations on Odd Fellows and F. Sos.* This pamph. ran through 13 ed. up to 1851. We have before us the 14th ed., "much enlarged and extended," dated 1867.

Odd Fellows, several Orders of.—In our outline of the *Manchester Unity* of O. F. under date 1810, we have spoken of the disruption which occurred about this date. The sections then split off took form and shape, and became transferred into other Order. of O. F.

The following Orders appear to belong to this period. It is quite remarkable with the *Secret* Orders generally, that the best kept secret appears to be their date of origin. It may happen upon further investigation that some of the following ought properly to be assigned to other periods. They are:

1. The *Grand United Order of Odd Fellows*. Whether this was a split from the "Manchester Unity," or how otherwise it orig., we have no means of ascertaining.

This is the largest of the several Orders which are distinct from the Manchester Unity, and the 3rd largest of the Affiliated F. Sos. Hardwick tells us that in 1851 the Order had 37,000 members. In Nov. 1870 it had 71,107 members, distributed in 1196 Lodges; and 62,713 of these, in 913 Lodges, and 124 Districts, were in E. & W. The great centres of its operations are in Lancashire and Yorkshire. There were 101 Lodges, with 4129 members, in the U.S.; and 87 Lodges, with 4265 members, in *Australia*.

The Conference of this Order meets only once in 2 years. The general government of the Order is vested in a Committee of Management and a General Sec.; they are elected at the biennial general meeting of the whole Order, and they settle all disputes as a final court of appeal. The Order is beginning to require financial returns from the Districts. Few of the Lodges (said Mr. Stanley in 1872) have a graduated scale of payments according to age; and most of them do not keep the management fund separate from the benefit fund. Reform in the So. appeared to him to be earnestly needed.

The head office of the So. is in *Manchester*.

2. The *National Independent Order of O. F.* came into existence about 1845, by a split from the Manchester Unity. By their *Directory* for 1871, the Order is said to number 34,564 members. Of these, 19,474 members, in 259 Lodges, and 33 Districts, were in *Lancashire*; 13,314 members, in 227 Lodges, and 20 Districts, in *Yorkshire*; 12 Lodges, with 747 members, in *Birmingham*; 10 Lodges, with 315 members, in *Newcastle*; 6 Lodges, with 221 members, in *London*. Several Lodges in *Wales*, and 1 in *Scotland* (*Aberdeen*).

The Order has held ann. movable conferences since 1846. They have usually been in Lancashire or Yorkshire. They pub. very little information. "Their funds (says Mr. Stanley) are but a small proportion of their liabilities; they have no graduated scale of contributions and of benefits; they rarely print balance-sheets; few of their Lodges are regis.; and a very large number of the Lodges spend their funds in Lodge liquor." (p. 18.)

At their Conference in May, 1872, held at *Bolton*, it was stated that the Order numbered 35,595.

The head office is at 97, Bridge Street, Manchester.

It publishes an annual *Directory*.

3. The *British United Order of O. F.* originated in a split from the *Nottingham Imperial Order*, in consequence partly of local jealousy, at what was considered excessive centralization in management. The Order is mostly located in and round *Sheffield*.

By the Quarterly Rep. of April, 1872, the Order had 7237 financial members, in 135 Lodges, and 6 Districts. These were distributed as follows: in *Yorkshire*, 3337; in *Northumberland*, 1739; in *Durham*, 1652; and in *Derbyshire*, 509. Of the 135 Lodges all were regis. but 17. The Lodges average about 54 members each.

The Order does not enforce a graduated scale; nor has it as a whole yet followed the good example of the *Manchester Unity* in many points conducing to efficient management. Some of the Districts are exceedingly well conducted.

There was this year founded the *Stationers' Mut. Benefit So.*, the members of which are limited to persons engaged in the paper trade. The benefits are £1 p. week for 13 weeks, and no more for that year; £10 on death of member; £5 for member's wife. The contributions are about the same as those in the *Manchester Unity* of O. F. At the close of 1875 the So. had 430 members, and £9500 in accumulated funds. There are very many members who fail to pay their contributions.

There was printed in Edin.: *Rules of the Edinburgh Holy Guild of St. Joseph F. So.: Instituted at Edin. under the Sanction of the Rt. Rev. the Vicar Apostolic of the Eastern*

District of Scot.; with an Intro. descriptive of the nature and general tendency of the Act. And an Appendix containing the T. relating to it as a F. So.

1846.—There was enacted 9 & 10 Vict. c. 27—*An Act to amend the Laws relating to F. Sos.* The preamble says: "And whereas doubts have been entertained for what purposes a So. may be estab. under the provisions of said Act [4 & 5 Wm. IV. c. 61] and it is expedient that such purposes be better defined:" and it is enacted that a So. may be estab. under the provisions of the said Acts for any of the following purposes:

1. For the lawful ins. of money to be paid on the death of the members to their husbands, wives, or children, kindred or nominees, or for defraying the expenses of the burial of the members, their husbands, wives, and children. No person under the age of six can be a member or have its life insured.

2. For the relief, maintenance, or endowment of the members, their husbands, wives, children, kindred, or nominees, in infancy, old age, sickness, widowhood, or any other natural state of which the probability may be calculated by way of average.

3. Towards making good any loss sustained by the members by fire, flood, or shipwreck or by any other contingency of which the probability may be calculated by way of average, whereby they shall have sustained any loss or damage of their live or dead stock, or goods or stock-in-trade, or of the tools or implements of their trade or calling.

4. For the frugal investment of the savings of the members for better enabling them to purchase food, firing, clothes, or other necessities, or the tools or implements of their trade or calling, or to provide for the education of their children or kindred with or without charitable donations: shares in such cases not to be transferable, etc.

5. For any other purpose which shall be certified to be legal in Eng. or Ireland, etc.

In cases where the rules did not prescribe the time when or the conditions on which members should be allowed to withdraw, members might withdraw on giving notice and paying all arrears (2). Payments to the So. "for any purpose in addition to that of providing relief, maintenance, or endowment in case of infancy, old age, sickness, widowhood, or other natural state as aforesaid," to be kept separate and distinct, or the charges defrayed by extra subs. of the members, at the time such contingencies take place (3). And that the rules for every F. So. estab. after the passing of this Act should provide that a book or books be kept, in which all moneys received or paid on account of any particular fund or benefit for which the rules of the So. provide should be entered in a separate account distinct from the moneys received and paid on account of any other benefit or provision (4).

Then as to sickness and mort. returns: 5. That the returns of the rate of sickness and mort. required by law to be sent by every F. So. at intervals of 5 years to the Barrister or Advocate by whom the rules of the So. may have been certified, shall be henceforth sent to the Registrar of F. Sos. in Eng., Scot., and Ireland respectively, according to such form as shall be prepared for that purpose by the said several Registrars under the direction of one of H. M. Principal Secs. of State, and with every such return shall be sent a rep. of the assets and liabilities of such So.: and this provision shall be inserted in the rules of every So. which shall be estab. after the passing of this Act.

Sec. 6 enacted penalties for not making such returns.

The Act also provided for the legalization of certain sos. as follows: 7. And be it enacted that any F. So. estab. before the passing of this Act for any purpose which is hereinbefore specified, or for any legal purpose which shall be certified and allowed as is hereinbefore provided, and shall not have been adjudged not to be within the provisions of the first recited Act by any Court of competent jurisdiction, shall be deemed to have been within the provisions of the said Act from the time at which the rules thereof shall have been or may be certified or allowed by the Barrister or Advocate appointed to certify the rules of F. Sos.

But after the passing of this Act, the Registrar, etc., was not to certify rules of any F. So. unless it adopted a T. of contributions certified "to be a T. which may be safely and fairly adopted for such purpose under the hand of the Act. to the Commissioners, etc., or of some person who shall have been for at least 5 years an actuary to some life ins. co. in Lond., Edin., or Dublin; and the name of the actuary by whom such T. shall have been certified shall be set forth in the rules and printed at the foot of all copies of such T. printed for the use of the So." (13).

The Acts of 1829 and 1834 were in part repealed; and the provisions of the Acts of 1799 and 1819 were declared not to extend to F. Sos. (8 and 9). There were also provisions as to settlement of disputes, production of books and documents, etc., etc.; This Act to be read with the Act of 10 Geo. IV. c. 56 (1829), and 4 & 5 Wm. IV. c. 40 (1834). [See 1850.]

Affiliated Orders.—The Act last named (9 & 10 Vict. c. 27) had an important bearing upon the *Affiliated Orders* of Friendly Sos. It exempted their members from the operations of the *Treasonable Purposes* and the *Seditious Meetings* Acts of 1799 and 1817, provided such Sos. were now duly enrolled; and "in which So., or at which meeting no business whatever other than that of the relief, maintenance or endowment of the several persons to whom benefits are assured by the rules of such So. are treated of, and which is

estab. solely for the purpose of assuring benefits depending on the laws of sickness or mort." (Sec. 9.)

It seems clear that for nearly half a century—that is, from the passing of the Act of 1797, or certainly after that of 1799—no F. So. belonging to the Secret Orders, or no So. having Branches affiliated in any degree with the Parent So., could lawfully carry on bus. That the Odd Fellows did not even now feel themselves free to do so—having reference to the proviso just quoted, is made clear from what follows. The Select House of Lords Committee, which sat in 1848, gave almost exclusive attention to this point.

But as to Sos. now designated as of the Affiliated Orders, other than the Odd Fellows, and perhaps one or two other Secret Orders who were then entirely in the background, the course was thrown open for them, and we have seen, in part, in the histories of those which we have already given, what wonderful growth they have made, and still continue to make.

Mr. Neison, in his evidence before the Lords Committee, 1848, gave a marked instance of the immediately beneficial operation of this measure, in substance as follows:

A So. having its offices in Chatham Place, Blackfriars, which had been estab. in connexion with a Dissenting chapel on the other side of the river, of which Mr. Sherman is the clergyman, went on for a considerable time; and about the end of 1846 I was invited to meet Mr. Sherman, Mr. Triton (brewer), Mr. Green (shipbuilder), and many influential gentlemen. They had tried to go on with the So., and at that time, beyond themselves, had only enrolled 9 members. The object of the meeting was to dissolve the So.; they had been enrolled under the old Act. I objected to this, seeing these men of so much weight there, who were evidently taking a warm interest in it. I suggested the making an experiment by suffering a little alteration to be made in their arrangements; and they enrolled under the new Act. The consequence is that now they have 2000 members in that short period; and they have branches in 20 or 30 towns. I have myself sent them 3 or 4 small Sos. which could not go on of themselves, which they have embodied in their own.

Chairman (to). Then their prosperity is owing to the principle of affiliation?

Yes; because London could not have made so large a So. There is a So. at Brighton also which was estab. with a view of ramifying itself; and I have myself made 1 for nearly 100 Sos. within that period, all having in view a So. with ramifications; and Mr. Adderly has just estab. with this view a So. in Staffordshire.

The *Affiliated Orders* of F. Sos. will be referred to in further detail towards the close of this art. (1874.)

There was pub. the *Hand-Book of F. Sos.* Anon.

During this year there was founded the *Christian Mut. Provident So.*, now known as the *Mut. Provident Alliance*. This has been an honestly managed So. We have given an account of its life ins. operations already, under its orig. title, in its alphabetical place in this work. We believe this is the So. referred to by Mr. Neison in his Obs. last quoted.

In 1855 the So. had 3966 sickness members. Mr. Neison then made a valuation of its affairs, and reported a surplus of £5587 18s. 1s.

It appeared that during the 5 years ending 31 Dec. 1855 there had been an aggregate of 6309 members—viz. 4461 males and 1848 females. Of these 1691 males and 624 females—together 2265—had left the So.; and 63 male and 30 female members had died—together 98; the bal. being 2772 males and 1194 females—together 3966.

The sickness benefit, as also the life annu. and the man. funds are kept distinct.

In 1866 the income from sickness contributions was £12,100; the man. expenses £3261, which slightly exceeded the amount set apart for the purpose.

On the 31 Dec. 1870, the So. had 2971 sickness members. A valuation was then made by Mr. Finlaison: the assets, including the value of future contributions, were £53,441 4s. 3d.; the liabilities on the sickness account £43,411 16s. 9d.—surplus £10,029 7s. 6d.; but this was pulled down by a deficiency on the endowment branch.

On the whole the So. was quite solvent.

This is one of the few successful Sos. worked in connexion with religious bodies in Lond.

There was this year founded the *East London Provident Inst.*, Commercial Road. The operations appear to have been attended with success. At the close of 1875 it had 746 members, and a fund of £11,142.

A noticeable feature in the hist. of F. Sos. this year was the occurrence of a series of poisonings in *Norfolk*, carried out in view of obtaining the funeral allowance from the F. Sos. to which the victims belonged. In 1848-9 another series took place with a like object in Essex. [See also COTTON, MARY ANN.] [NORFOLK POISONINGS.]

1847.—Mr. Peter Hardy pointed out in his "Popular Illustrations of Life Assu.," contributed to the *Saturday Mag.* and reprinted in the *Life Assu. Record* for this year, that "the bus. of a friendly or benefit so., when conducted upon an extended scale, and based upon scientific principles, is far more complicated than that of an assu. so. F. Sos., indeed, embrace a variety of objects, such as provisions for old age, allowances during sickness and incapacity for labour, death-pay, and funeral money, none of which, with the exception of the two last (which are modifications of life assu.), are in any way connected with the bus. of ordinary life sos."

There was pub. in Edin. *Rates of Contribution for Allowance in Sickness*, by W. Wood.

There was founded the *North Staffordshire Prov. Asso.*, a quasi-County F. So., acting within narrower limits, and having its chief membership in the artisan class, instead of the agricultural, which forms the chief staple of the County Sos. generally. The Rep. of the F. Sos. Commission, 1870, speaks of this as "a So. combining every element of

good gov., a graduated scale of payments, prepared by an act.; quinquennial valuations; a considerable accumulated fund, in proportion to the number of members; a fairly low cost of man. (8 p. cent. on gross receipts on an average of 10 years, or 10 or 11 p.c. on contributions only), and a general interest in the man. on the part of the members." [4th Rep. p. liii.]

The So. has 13 T.—4 for sickness, according as the contributions and benefits cease at 60, 65, or 70, or continue during the whole of life; 4 parallel ones for death, the contributions ceasing at 60, 65, 70, or continuing during the whole of life; 3 for deferred annu., the benefits beginning and contributions ceasing at the same 3 ages; and 2 for endowments. The sickness benefits range from 5s. to 20s. p. week; the payments on death from £5 to £50; and deferred annu. from 2s. 6d. to 10s. p. week; and the endowments from £5 to £100.

Subscribers under the first 3 Sickness T. (*i.e.* for periods short of the whole of life), must contribute also to deferred annu., under the 3 corresponding T., *i.e.* so that the one benefit shall begin when the other ceases. There have been only two or three members who have subs. for deferred annu.

The So. excludes no special occupation: yet unhealthy trades are carried on in the Pottery districts; and the mort. is above the average; but the scheme of the So. was in the beginning adapted to the circumstances of the *locality*, as indeed should always be the case.

While the sick pay continues during the whole of life, it is stated in the Rep. already quoted, that only one case of attempted imposition upon the funds had been discovered during a period of 22 years. This is mainly due to good management.

In 1875 the So. had 1395 members, and an accumulated fund of £19,888.

There was this year founded the *Metropolitan Commercial Travellers and Warehousemen's Asso.* At the close of 1875 it had 574 members, with an accumulated fund of £8242.

There was founded this year in Liverpool the *St. Anne's Catholic Burial So.*, the peculiar feature of which is that by rule 14, s. 7, the members are required, on receiving the funeral benefit for any person over 10 years of age, to pay 2s. 6d. for a mass. Mr. Stanley (Rep. 1874, p. 32) says: "This rule has somehow slipped past the Registrar, though it provides for a purpose certainly not contemplated in the F. Sos. Act." He adds: "This So., being smaller, is better man. than most of the others [Burial Sos.], though the rule as to the management fund is entirely disregarded, and no separate accounts are kept."

The So. had in 1872 nearly 20,000 members, and its whole accumulated fund was £569 11s. 0½d. The cost of management was about 33 p.c.

There was founded in Lond. this year a F. So. called the *Farriers Horseshoe Fund*. The objects of the So. were to afford relief to the members when sick, suffering from infirmity, and old age; and also for the burial of the members and their wives. The T. of contributions were certified; and the rules duly enrolled. There were some alterations therein in 1862. It seems that in course of time payments came to be made to members out of work, although there was no authority in the rules for this: and it was a contingency for which the actuary could not have provided in preparing the T. This first departure led to a still more serious one.

In Nov. 1866, the number of members then being about 300, a special general meeting was held to receive a report in view of taking part in an intended Reform Demonstration; and it was finally resolved that this be done. The demonstration took place on the 3rd Dec., and the United Farriers formed an object of attraction. This incident was followed by the funds of the So. being debited with the following "little account":

	£	s.	d.		£	s.	d.
Insertion of Circular to masters				Drying and putting away regalia	0	2	6
in <i>M. Advertiser & D. Telegraph</i>	1	8	0	Postage of circulars to masters	0	1	0
Horses for 14 officers at 20s. ea.	14	0	0	Ditto of notices to members	2	18	6
Admission-tickets to ground	2	3	6	Ditto of employers of labour in			
Fitzroy Works brass band	9	0	0	first division	0	8	3
Horses for 35 private members	26	5	0	Attendance of Sec. at 2 special			
Flag-carriers and refreshments				meetings	0	4	0
to ditto	3	14	6	Refreshments to Committee ditto	0	13	0
Cleaning & repairing large banner	0	2	6	Expenses incurred in hiring horses			
Messrs. Rumney and Carpenter,				by Messrs. Bowley & Matthews	0	7	6
washing poles	0	2	0				
Mr. Wolfe's expenses as delegate	2	0	0	Total	£63	10	3

On the 8th Feb. 1867, two of the members called upon the Regis. of F. Sos., and requested him to put in force as against the officers of the So. the 9th sec. of the Act of 1860, which authorizes the Regis. to proceed summarily if any officer, member, or other person misapplies the funds, or wilfully applies any part of the same to purposes other than those expressed or directed in the rules; and on conviction, subjects the offenders to repay the amount of money improperly applied; and to pay, if the Justices think fit, a further sum not exceeding £20, together with costs; and in default of such repayment, imprisonment with hard labour for a period not exceeding 3 months.

The Regis. at once put himself in communication with the officers of the So., and intimated his intention to proceed. Five days afterwards he was informed that the money had been replaced, and that no money would in future be taken away for trade purposes. The Regis. did not proceed further; and it is to be hoped the So. was saved.

1848.—There was introduced into Parl. a Bill bearing the title: "An Act for the more effectual Protection from Fraud and Misappropriation of the Funds of certain Charitable, Philanthropic, and Provident Asso., and for the Relief of the Members thereof from the provisions of an Act made in the 39th year of the reign of H. late M. King Geo. III. intituled, 'An Act for the more effectual Suppression of Sos. estab. for Seditious and Treasonable Purposes, and for better preventing Treasonable and Seditious Practices;' and likewise of another Act passed in the 57th year of the reign of H. late M. King Geo. III. intituled, 'An Act for the more effectual Prevention of Seditious Meetings and Assemblies;'" and this measure was referred during the same Session to a Committee of the Ho. of Lords to consider and report.

Regarding the Acts herein specifically referred to, we have given details under date 1799 and 1817.

The Select Parl. Committee of the House of Lords appointed to consider and rep. upon the last-named measure, and also "several petitions relating to the said Bill, or connected with the subject thereof," sat this year. The witnesses called before it for examination were Mr. Francis Gustavius Paulus Neison; Mr. Wm. Benjamin Smith, Grand Master of the Manchester Unity of the Independent Order of Odd Fellows; Mr. John Tidd Pratt; Mr. Charles Ansell; Mr. Griffith Davies; Mr. John Finlaison; Mr. Alexander Glen Finlaison; and Mr. James Roe (Sec. of one of the Districts of Odd Fellows). The Chairman of the Committee was Lord Beaumont. The Rep. and evidence were laid before Parl., and were ordered by the House of Commons on 14 Aug. to be printed. The following are the main passages of this Rep.:

The Committee find that no less than 13 Acts have been passed since the year 1793 for the encouragement and better regulation of F. Sos.; but notwithstanding the attention paid by Parl. to the subject, their efforts have failed to produce the desired effects, and add. legis. seems to be urgently required. From a deficiency in the means adopted to facilitate or enforce compliance with their provisions, these Acts have neither secured the stability of Sos. enrolled under them, nor prevented the rapid growth of independent and illegal asso. When the Sos. which bring themselves under the 9 & 10 Vict. are small or isolated bodies, whose members are too few in number to be influenced by the sense of mut. support, and whose funds, notwithstanding their T. are certified, are insufficient to meet any accidental pressure, *an unhealthy season may make them bankrupt*. They often, according to Mr. Tidd Pratt, spend their contributions in dinners, and waste the funds of the So. in a public-house. From ignorance or want of influence in their officers, the rules of small Sos., though registered and certified, are in many instances not enforced; nor is there any supervision to prevent a So. estab. under the 9 & 10 Vict. from raising distinct subs. for purposes totally alien to the intentions of the Act.

From the evidence laid before the Committee, they are of opinion that there are advantages connected with the larger provident asso. which smaller bodies can hardly expect to attain, except in particular cases of extraordinary local support or supervision. While the slightest deviation from the scale of contributions and benefits deranges irretrievably the finances of small asso., larger and more influential bodies may be able by exertion to extricate themselves from even serious difficulties; and the consequence is, *that while the small bodies are decaying or sinking into neglect, the affiliated bodies are growing rapidly in strength, and extending their branches in every part of the kingdom*. The Order of Odd Fellows in particular has reached such gigantic proportions, and obtained such extraordinary popularity, that it seems to possess the greatest attractions for the younger portion of the labouring class, and threatens to supplant all minor inst. of the kind. Without assistance from the State, and unprotected by the Law, this asso. already numbers 260,000 members, and is in the ann. receipt of about £340,000. So extensive an asso. becomes a powerful instrument of good or evil in proportion as its objects are useful or dangerous, and its members well or ill affected to the laws of the land. Founded orig. for the promotion of Good-fellowship, the Order of Odd Fellows has gradually assumed the character of a Prov. So.; and though songs [signs?] and ceremonies distinguish the meetings of its members, provisions against sickness and death are now the more prominent bus. of the Unity. The existence, however, of such an asso., must be held to call for the serious attention of Parl., as it is clear that an affiliated body with such resources at its command must become highly dangerous if it should ever be turned from its legitimate objects. The Committee, as far as they are enabled to form an opinion, have no reason to doubt either the loyalty of its members to the constitution, or their firm attachment to public order and good gov.; but certain customs have been adopted by the Lodges of the So. which, without contributing to its utility, are open to very serious objections; viz. the employment of secret signs, the circulation of lectures, and the introduction of funeral orations after the burial service.

In legalizing the Order, as the Committee next recommends, it was considered of great importance to insure as far as possible that it should "have no other objects but those of a strictly charitable and provident nature; and the Committee are of opinion that all the above-mentioned customs should be discountenanced by Parl.;" and the Rep. proceeds:

Without a sense of protection from the Law, or a feeling of obligation to the State, such asso. may lose their attachment to existing inst., and become discontented, from the impression that their interests are neglected. Assuming therefore that the purposes for which the Odd Fellows So. is estab. are lawful and innocent, and considering it advisable to increase the attachment of so numerous a body of the industrious classes to social order, the Committee recommend such a modification of the Laws respecting affiliated or corresponding Sos. as would legalize the inst. so far as it is one of an exclusively provident character. *Great caution, however, ought to be observed in drawing up the clauses of a Bill for that purpose, as it will be necessary so to construct them as to prevent Trades Unions and other objectionable asso. from availing themselves of them.*

We shall see as we proceed how much or how little this last recommendation has been regarded. The Rep. continues:

The chief merit of a Provident So. consisting in an efficient adjustment of its scale of contributions and benefits, the Committee have paid considerable attention to this point, and endeavoured to

ascertain if there are any means of placing the funds of this So. on such a footing as to insure ability to fulfil all its promises.

This portion of the inquiry is surrounded with great difficulties; nor is the information which the Committee have been able to obtain of a nature to justify them in pronouncing a positive opinion on the subject. *Either from insufficiency of data, or from the incorrectness of those which have been collected, a wide difference exists in the conclusions of different actuaries.* The returns of F.S. under the 9 & 10 Vict., though compulsory, are most incomplete. There is no supervision in the collection of them, and consequently the greatest carelessness in filling them up. Mr. Tidd says, "If we take either the T. of Mr. Finlaison, Mr. Ansell, Mr. Davies, or Mr. Neison, who are four gentlemen who have certified most of the rates [in the rules] lately certified by me, there is most material difference between them; and I have been put to a great deal of trouble among letters asking me to account for the differences between those gentlemen." While general opinion is information is so notoriously imperfect, a particular difficulty is added to the case of the Odd Fellows So. by the circumstance of their sources of income as well as their liabilities being different from those of other Benefit Soss.

Previous to the last 3 years little attention appears to have been paid by the Order to their sickness and mort.; the Lodges considered themselves benevolent rather than provident, and trusted as much to the voluntary subs. of the members as to the regulated T. of payments adopted by the rules of the Order. *Mr. Neison's writings first called attention to the question, and in the pub. of his pamph. great efforts have been made by the So. itself to spread amongst its members correct information on the subject.* It appears, however, from Mr. Smith's evidence, that Mr. Neison's obs. on the position of the Order were founded on very incorrect data, and that he has omitted many important considerations in calculating the future financial condition of the So. It seems that though estab. since 1814 (? 1816), the So. are at present able to add ann. from £90,000 to £100,000 to their surplus fund, and that from 15 to 20 p.c. of the members are in a station of life to forego their claims to the benefit provided for them. Notwithstanding, however, the advantages this So. possess in comparison with less powerful bodies, it is apparent that its rate of contribution is too low to enable the So. to fulfil eventually all its engagements. The *Edinburgh* and some other districts have already adopted the high rate of contributions recommended by Messrs. Wood and Neison, and should the Central Committee enforce similar scales in all the remaining districts of the *Unity*, the Odd Fellows So. would be, in the words of one of the actuaries examined, the greatest economical inst. of modern times. Until, however, rules to the above effect have been universally adopted by the Order, the Committee would consider any special favour granted to the So. as an encouragement to young men to join the body with the foreknowledge that the promises held out to them can never be completely fulfilled. Mr. Smith's evidence as well as Mr. Neison's leads to the opinion that the So. is in a position which will admit of its redeeming itself if it should adopt and adhere to proper regulations for that purpose; and the former states his expectation that it will prob. do so in the course of the next 3 years. And the Committee are of opinion that from the magnitude of the interests involved, it is expedient to give the Order an opportunity of placing itself on a sound footing, and not leave it to persevere in a course which must end in eventual disappointment and insolvency. *The Committee refrain from entering on the consideration of the apparent hardship in fixing uniform rates for healthy and unhealthy trades, wholesome and unwholesome localities, etc., believing such inequalities to be incident to all Benefit Soss. and Assn. Cos.*

Independent of the imperfection of the scale of contributions, the Committee found the following circumstances prevented the Order of Odd Fellows from availing themselves of the Benefit Soss. Acts:

1. Each Lodge would be obliged to be enrolled as a distinct So., paying the fees required on regis. The Manchester *Unity* of Odd Fellows being composed of 4200 Lodges would have to pay in regis. fees alone £4200!
2. A dispute in the Order is referred for arbitration to a jury chosen in the Lodge where it originated; and if the award does not give satisfaction, the case is taken before a District Committee composed of delegates from each Lodge in the District, subject, however, to an appeal to the Central Court of Directors, whose judgment is final. Neither the District Committee nor the Court of Directors can be considered as arbitrators appointed according to the provisions of the Acts now in force; and consequently the rules of the So. could not be certified by the Registrar.
3. It is moreover required by the Act that rules or amended rules in order to be certified must be passed by a general meeting called in the county where the So. is estab., whereas in the *Manchester Unity*, the general rules of the So. are proposed and adopted at the ann. movable meetings composed of delegates from the various lodges spread over the U.K. Neither the election of delegates nor the ann. movable meeting can be considered as a compliance with the terms required by the Act; and consequently the rules which provide for this portion of the system could not be certified by the Registrar.

The Committee in conclusion suggested a modification of the Acts then in force, by suspending for the space of 3 years certain provisions of the 9 & 10 Vict. c. 27 (1846); and made provision in the Bill to that effect; with some amendments on other points.

We propose to review the evidence briefly:

Mr. Ansell, examined as to what constituted *Sickness* in a F. So., said:

The definition I have endeavoured to give for sickness, as applicable to the affairs of a F. So., has been, that it is a physical condition which renders men incapable of pursuing their ordinary avocations; but whether that definition would apply better to one trade than to another I am not prepared to say. There are professions that produce peculiar sorts of sickness, and that might prevent a man from following one profession or trade without necessarily incapacitating him from following another; but I do not know that those cases are numerous (523).

His examination was continued, as follows:

524. Would not, for instance, in a trade wherein there is required great delicacy and manipulation in the use of the hands, a slight injury be a sickness sufficient to prevent a man from following that trade, which in a more rough trade, or one not requiring so much delicate use of the fingers, would not impede him from following his work?—I can imagine that there can be such distinctions, but if so I am not prepared to give any opinion as to the relation which such a trade as that bears to trade in general. I am not disposed to attach great importance to it; I think that it is rather an imaginative point than a practical one.

525. For instance, a sprained ankle is no impediment to a shoemaker, or to a tailor, or to a watchmaker, or any of the sedentary occupations, but to a day labourer it is absolute incapacity from work?—Yes; I can understand that such things may occur, but I doubt whether the practical influence on the rate of sickness experienced in a F. So. is great. It occurs to my mind as an imaginative point more than a practical one, and to be a thing which would suggest itself to a student rather than to the actual administrator of the affairs of a F. So.

526. The object of the question is to ascertain whether a general T. drawn from the data on which you have drawn your T. would be applicable to a small So. composed of people chiefly of one profession?—Of many professions I should think certainly not. I should think that no T. that is proper for an agricultural community would be proper to suggest for the use of coal-miners; on the contrary, I should think it highly improper; it would lead in one case probably to the accomplishment of the objects sought by the inst.—that is, the agricultural community, and to utter ruin in the other instance. I stated something exceedingly like that in print some years ago, as I have already mentioned.

527. Therefore, if F. Sos. are composed generally of small numbers, and chiefly of separate trades, it will require separate T. for almost every So.?—No; I do not think that there is such a difference in ordinary trades as to make it necessary to frame T. for every distinct occupation. Such trades as are injurious to health certainly should not adopt the same T. that would be very proper for occupations which are not injurious to health; but I should myself deem it a great loss of labour to use a separate T. for every trade.

He had previously (Q. 521) said :

If it were a profession not unhealthy, I should consider such a T. [a general T.] to be applicable; but to the needle grinders of Redditch, or to the dry grinders in Sheffield, or other occupations which are notoriously injurious to health, it would not be applicable; nor would it be applicable to miners.

Again :

548. Would it be possible to draw up an Average T., taken from very extensive data, applying to all classes of the community, and extending in number to 200,000 or 300,000, against any risk of insolvency?—In answer to that question, I should say in my opinion no difficulty whatever would exist in drawing up such a T. as has been described; but except it were made compulsory upon all men who entered F. Sos. at all to conform to that T., *those who were healthy in a community would take care to class themselves together, and keep away from a So. so constituted; it would then leave upon the supposed So. an undue proportion of unhealthy members, and so destroy the effect of the contemplated Average T.* I should think it a most unjust proceeding also; it would be very much like insisting on persons who made assu. on lives of all ages pay an average rate of prem. You could, it is true, determine some average rate which would on the whole be safe, but it would not therefore be safe to insist upon its general adoption.

549. Such a So. would be analogous to an ordin. life assu. [asso.] which had an average rate of prem. for all ages?—Yes.

550. But such an Average T. as has been spoken of would not require a very great increase of payment from the healthy, or a very great decrease of the amount of contribution which ought to be paid for the unhealthy?—That I am hardly prepared to answer, for this reason—that all those persons who were following very unhealthy occupations, when they came to understand that they were to be admitted on such a rate as would be the proper average rate for the whole community, would enter in larger numbers relatively than those who followed more healthy pursuits; and I think such a T. therefore would be unsafe even when an average rate had been ascertained.

551. Healthy ones would stay out?—Yes; and others would have a strong temptation to come in—and would come in.

The following question and answer regarding *large* as against small sos. occurred :

538. Then in your experience have you found that the *County* Sos., notwithstanding the instance you have mentioned, have succeeded on the whole better than the small *Local* Sos.?—On the contrary, I should say the small local sos. have succeeded a great deal better. I have recently also made an investigation for two more circumscribed Sos. than those last referred to, and in each case there has been a surplus or excess to divide. If I were to speculate, without any experience, on the subject, or with little experience, the disposition of my mind would certainly be in favour of the larger sos.; but *practical experience leads me to the contrary conclusion.*

The following relate to some points of practice regarding which Mr. Ansell's opinion was certainly most valuable :

574. Do you know of any So. in which the members are allowed to *diminish the amount of their weekly contributions* in consideration of their receiving a less amount of allowance in case of sickness?

—There is, I think, a modification of that principle in operation in a F. So. which has been estab. in the county of *Kent*—where, under certain circumstances, if a party should become poor, and is incapable of making any further contribution, provision is made for the cessation of the contribution, reducing the sick allowance after the contribution ceases.

575. Do any of these sos. provide, as some of the ins. offices do, the power of selling the pol., as it were, on the part of those who are unable or unwilling to continue their contribution?—The *Reigate* F. So., I believe, makes a provision of that sort, and some others, also, which have come under my notice, have a similar provision; I do not recollect their names at this moment.

576. That a person who has contributed for a considerable period may withdraw without sacrificing all his previous contributions?—Yes, having some portion of his previous contributions returned to him. Such a provision exists in some sos., but not in very many. It is a very desirable principle to estab.; but there is some difficulty in carrying it into effect in F. Sos., from the insufficiency of the clerks they are usually able to pay. They cannot make the proper computations, and are very likely to make great blunders.

577. Would not some provisions be particularly desirable in a country like ours, where the labouring classes circulate so much, and therefore lose by changing their place of abode perhaps the power of continuing their connexion with the So. which they orig. joined?—I think it would be extremely desirable. A man who has been 20 years in one neighbourhood, who entered a F. So. at the age of 20, if he should go away to a new district and desire to join another So. at the age of 40, would have to pay a greatly increased rate of contribution, although he might have kept in the first So. just enough money to have carried with him, and have gone on with his first estab. rate of contribution.

578. Suppose he wished to emigrate, would it not in some cases enable him to retain a little capital for the purpose of doing so?—No doubt; as a principle I think it very desirable and just.

Mr. Griffith Davies was called, and interrogated as follows :

581. Do you agree with what Mr. Ansell has stated?—I am not aware that I differ from what he has stated.

582. You equally believe that T. drawn up from small bodies are more just than T. drawn up from large and extensive bodies?—What I have found to be the case practically is this, that as actuaries we have two distinct matters put before us: one is to certify the T. for a So. to begin, another is to ascertain the state of an existing So. at any given period. In the latter, that is, making a valuation for existing Sos., we find what has been the operation of the So., and are led to ascertain what may be the state of the So., and if it is not a healthy So., we sometimes discover the reason which has made it otherwise. Practically I have found that large Sos. governed by hon. members do not work so well as Sos. where the ordinary members manage their own affairs—where . . . each one watches over the other to prevent the So. being imposed upon; whereas in large Sos., the man of which is under

the direction of hon. members, one member will help another to get an allowance from it, in a state in which he cannot be said to be, perhaps, healthy; but in a state in which it would not be allowed if the So. were conducted on the principle of the members looking after each other: and I do verily believe that they do not work so well: or, in other words, that larger contributions would be required in large Sos. than in smaller ones which are conducted by the ordinary members. Another thing which I have found practically is this, *that nearly all those Sos. which admit female members fail.* It is almost impossible to define what is the sickness of a female; a female may be in her family, giving orders and so on, and yet absolutely, if a medical man examined her, he would give a certificate entitling her to relief in sickness; whereas, in the case of a man, it is known whether he is at his work or not; the female, though receiving an allowance from the So., is at the same time going about her duties in the house. On that account we find that the sickness which is charged for among females is incomparably greater than that among males.

583. Is there more real sickness in female life than in male life?—I do not know; I have no means of determining except by what has been claimed.

Mr. Ansell was asked the following question on this question of female sickness exp.:

584. Have you any remarks to make upon this point?—I am now engaged upon the investigation of the rate of sickness and mort. which has been prevailing for 30 years in a So. which has enrolled in its list over 10,000 members. For my own satisfaction I have separated the whole of the *female* cases from the male, . . . and I found that the sickness among the females, taking age for age, was throughout the greater part of life more than twice as great as among the males. I cannot add anything to the valuable obs. which have been made by Mr. Davies upon that subject, except that I know they are the result of great experience.

Mr. Davies begged leave to add one observation:

I think it will be found that valuations made in the way which I have described might alter the working of a So. A large County So. managed by hon. members employs a surgeon to investigate every claim which is made for sickness, and that goes on until a valuation is made. Then they find that they do not go on well; there is a more rigid examination; they are not quite so lax in allowing claims to be made for sickness: and two sos. composed of persons employed in the same trade, one having the claims submitted by one medical man, and the other by another, may be found practically to differ very materially in the amount of claims allowed for every 100 members in the course of a year. That is the practical working of the Sos.

Mr. John Finlaison, Gov. Actuary, was next examined:

596. Have you any obs. to add, to what has been stated?—I fully concur in that which the two learned actuaries have stated. . . . (605). There are two points upon which I should like to make some obs. The one is with respect to large sos. as compared with small sos. . . . I know as instance in the suburbs of Lond. where there is a very large so. supported by a great number of benevolent hon. members, and when it was instituted T. were supplied for its government. For the first 5 years it went on most prosperously. When the valuation took place at the end of the quinquennial period, . . . they were found to be flourishing, and had some considerable surplus, because great vigilance was used not only on the part of their medical man, but of their overseer or steward. Another 5 years went on, and then the case was altered altogether. Upon examining the sickness that had occurred among them, I found that there was an excess of a certain number of weeks' sickness that should not have been in the ordinary course of things—perhaps as much as 350 weeks' sickness. *It turned out that one individual had been imposing upon them by sham sickness, and had been the cause of all that difference;* nor had they any means, as the law now stands, of getting rid of him; and it nearly brought the So. to ruin. . . .

620. . . . Allusion was made in the early part of Mr. Ansell's examination to certain dangerous trades that are carried on?—I have had some years experience in that; twice or thrice, at intervals of 5 years, I have valued a very large so. consisting of the miners who work in the plumbago-mines in *Cumberland*, and the rate of sickness among them is awfully great. No T. whatever that any actuary would venture to lay down seems to be commensurate with the sickness they undergo; they have a peculiar sickness applicable to themselves which is called the miner's cough, and it disqualifies them from work for many weeks out of the year; and I have no doubt whatever that there is a great mort. among them. That shows the impossibility of a general T. which would give access to the people pursuing dangerous trades, and discourage the very healthy ones, who most certainly would, as Mr. Ansell has stated, separate themselves into Sos. where they would mutually insure each other; and whether they got the benefit of the Act of Parl. or not, they would prefer to keep apart.

Mr. Alex. G. Finlaison was examined. He was asked (*inter alia*):

655. Is not the proportion of sickness in an agricultural life greater than in a town life?—I am not aware that that has been satisfactorily demonstrated.

656. Is not life longer in an agricultural district than in a town district?—I do not think that has yet been proved in this country.

(Mr. John Finlaison).—There are countervailing causes in an agricultural district, and in time the bal. is pretty equal. On the one hand there is the benefit of open air in the country, and on the other hand there is the benefit of dry firesides and dry feet in town; and taking the whole together, I think the compensating causes are very much equalized.

657. So that you do not think the value of life greater in country than town?—No.

(Mr. Davies).—We think the difference of longevity is not so great as that which is shown by Mr. Neison. We do not doubt the accuracy of Mr. Neison's calculations, but we doubt the accuracy of the data he has received.

658. (To Mr. Davies).—Then in fact the data upon which calculations of this kind are made are yet to be looked for?—They are very incomplete.

(Mr. Ansell.) As the last question seems to afford an opportunity for a suggestion, I would ask permission to remark, that the more useful way in which actuaries or statisticians might be employed upon the subject of the Committee inquiries would be rather to seek improved data, than in dealing with existing data as mere matter of arithmetic. There is no want of arithmetic; but we should all be exceedingly glad to see the data more perfect that are submitted to us; and if the Gov. or any sufficient authority would dedicate some care to the point, I think a great deal of good would be attained; that is, if it were done under the considerate opinion of those who were accustomed to deal with statistics. It is rather a dangerous subject to treat lightly; it is very easy to manufacture figures and statistical T. and make them look exceedingly learned and great, without their having any intrinsic value whatever.

659. Then would it not be very important for some Committee or Board of Actuaries to draw up a list of the desiderata which would be within the reach either of local bodies or of the Gov. to collect?—It would be exceedingly useful. The great point in obtaining statistical information is to have efficient supervision over it. *I know of no instance that has come personally under my own observation in which I have been more struck with the insufficiency of mere figures, than I have as*

respects the returns made by these F. Sos., conformably with the laws relating to such inst. The returns on which I founded my orig. T. were some years ago obtained by the So. for the Diffusion of Useful Knowledge, and I think no person furnished those returns but those who evinced a voluntary zeal to arrive at the truth, or to get such information as should be really available for the purposes in question; but the returns that have been made in conformity with the Act of Parl. are compulsory, and many men fill them up they care not how, so long as they discharge the function that is imposed upon them by law. When those returns which are now made to Parl. were first received, they were submitted to me with an offer of their use for arrangement. I went through many of them, and I saw what appeared to me so many glaring and evident defects that I attached no importance to them, and declined the use of them. The returns in the form in which they are now required from every So. in the kingdom are, I believe, made carelessly, and when they come have no authority to my mind. I would very much sooner obtain the returns from 100 or 200 sos., and have some one carefully over-looking the mode in which they were filled up, because then I should have some reason for depending upon the truthfulness of the facts which were communicated: the mere deductions from them would be a very unimportant labour. To these points I think care might be usefully directed by experienced actuaries, or to [by] anybody who is sufficiently accustomed to such accounts. (Mr. Finlaison.) I fully concur in Mr. Ansell's observation. (Mr. Davies.) If you look at Mr. Neison's T. concerning agricultural pop., and at the ordinary T. of human longevity, you will perceive that by the former man is made almost immortal. I am not speaking of that gentleman's calculations, but of the looseness of his data, and of the wrong conclusions to which persons may be led by such data; and I may add that the T. of Mr. Neison in reference to agricultural pop. make the value of a life annu. much too near, in my opinion, to the value of a perpetual annu.

The practical points embraced in the evidence of these witnesses—all men who practically understood the subject—must be our apology for quoting it at such length.

In the *Companion to the British Almanack* this year there is contained an art.: "Odd Fellows and F. Sos.," in which is contained much interesting information. The writer says:

It is to be feared that the members of F. Sos. generally do not sufficiently bear in mind that they have no one to look to but themselves for the fulfilment of the engagements of the So. to which they belong; and that it therefore behoves them to inquire whether the means are likely to prove adequate to the end in view. The case would be wholly different if the benefits were guaranteed by some responsible body, distinct from themselves, in consideration of certain defined payments on the part of the members. The latter under such circumstances might safely leave all questions touching the adequacy of the contributions to be mooted and settled by those with whom they might be dealing, and whom alone it would concern. So long, however, as these asso. continue to be constituted on the mut. principle, there ought not to be a doubt as to the sufficiency of the contributions. Bearing in mind how much easier it is to dispose of a surplus than a deficiency, and that one or other of these will be sure to develop itself in the course of time, the concoctors and man, of F. Sos., if fitted for the important duties they have taken upon themselves, will not fail to adopt such a scale of contributions as shall exceed, rather than fall short of, what experience itself declares to be necessary.

Mr. F. G. P. Neison pub. a pamph.: *On the Propriety of Reviving the Scottish Box*.

There was this year founded in Exeter, under the patronage of Lord Fortescue and other local gentlemen, *The Western Provident Asso.* It is of the type local and general, having in 1872 some 60 branches in the Western Counties, 1 at Portsmouth and 2 in Lond. The management is very much in the hands of the *ex-officio* members; but these have performed their duties with care and discretion.

The T. were orig. prepared by Mr. Neison, sen., but have twice undergone actuarial revision, we presume to adapt them to the experience of the So. The valuations are made quinquennially. The benefits, 6 in number, viz. sickness, medical aid, deferred annu. or old age endowment, sum at death, and deferred endow., may be subscribed for singly or collectively, except that medical aid must be combined with sickness.

The pub. accounts are very complete; and on the whole this may be regarded as a model So.

In 1872 it had about 4000 members. It is not an increasing So. It has been discouraging endowment ins. bus.

In 1875 the members were returned as being 2934, with an accumulated fund of £65,557, being £14 12s. p. member.

Mr. Neison in his evidence before the Lords Committee this year gave the following incident regarding the estab. of this So.:

26. . . . A large So. is now being formed, under considerable influence, at Exeter. The rules of the So., which are not yet enrolled, . . . provide that all payments to a sick member shall be made at the office of the So. or to his representative. Some have a delicate feeling that this would be placing the member who is sick, or his wife or son, in a position like going to the workhouse to receive alms, by giving a sort of public appearance to it; and a large body of Odd Fellows now offer to join the So. when it is enrolled; but they make it a condition that the money shall not be paid in that way: but that the Visitor who is to go and to see whether the party is sick or not shall pay the money when he is satisfied there is a right to it. The bye-laws should merely relate to the simple methods of granting or administering relief; it is only having regard to their feelings, in order to remove the appearance of their claims on the funds being paid in the shape of charity. Some would think it not right to pay money in that way [*i.e.* through the Visitor], others would think it the best way. Then, differences of opinion often relate to mere unimportant whims and caprices; some members prefer one method, and some another; and often in these petty matters differences arise.

1849.—There was introduced to the Ho. of Commons "A Bill to make better provision for the Certifying the T. of Contributions and Payments of F. Sos., and for ascertaining from time to time the Solvency of such Sos." This Bill and several petitions thereon were referred to a Select Committee of the Ho., who were empowered to take evidence and to report their observations thereupon to the House.

The members of the Committee consisted of Mr. Adderley, the Attorney-General, Mr. Henley, Mr. Ewart, Sir John Duckworth, Mr. Tennent, Mr. Maitland, Mr. Baines, Lord Dudley Stuart, Mr. Brotherton, Mr. Roundell Palmer, Mr. Bonham Carter, Mr. Scholefield, Sir Henry Halford, Mr. T. H. Sutton Sotherton, the latter acting as Chairman.

Mr. Spooner was at a later period substituted for Mr. Ewart. Here was a Committee containing many names of men in deep sympathy with the industrial classes.

Among the witnesses called before the Committee were Mr. Neison, Mr. John Fa-laison, Mr. A. G. Finlaison, Mr. Charles Ansell, Mr. David Jones, and Mr. J. T. Pugh. There were also a number of persons connected with the practical man. of F. Sos. called.

The detailed objects of the Bill as introduced were :

1. To enact add. precautions with regard to the certificate of the actuary, by requiring him to see that the rules, particularly those which bear upon the pecuniary interest of the members, were not inconsistent with the purposes for which the T. were calculated, nor were likely to endanger the stability of the So.; and to state the data of expected sickness upon which the T. were computed.

2. To make the quinquennial valuation more complete and exact, by requiring that it should be drawn up by an actuary; and

3. To direct that the ann. returns as well as the quinquennial reports from all Sos. should be transmitted to the Registrar, who shall lay before Parl. an abstract of them, and in his digest of the quinquennial valuations shall present a view of the rate of sickness and mort. experienced by each So., contrasting it with the data upon which the T. were founded, in order that Parl. might authorize the result to be printed and circulated for general information.

The principal paragraphs of the Report are as follows :

Your Committee having read the clauses of the Bill referred to them, thought it advisable to apply to the Ho. for leave to take evidence on the subject; and having examined 16 witnesses, submit the following Rep. :

... As the object of all these voluntary asso. is in some way to provide by mut. assu. for the relief of their members in sickness, age, or other natural casualty or infirmity, and of their families at their death, it is obvious that the welfare of all classes is much concerned in the sound constitution and good management of such Sos. Of late years, by the exertions of benevolent persons, and by means of a more extensive and accurate collection of statistical materials, better information has been obtained and diffused, of the calculations and principles upon which such Sos. ought to be based. Attention has been much turned to the defects inherent in the old clubs, and many Sos. on a sounder system have been estab.; still it is stated by the secretaries and others who have attended the Committee that in the great majority of F. Sos. and Clubs at present existing, an accurate examination of their accounts would show that the rate of contributions is not sufficient to enable them to pay the benefits insured thereby; that in many instances they have been compelled to reduce or suspend their allowances; and those Sos. which have hitherto kept their engagements have prob. been enabled to do so by a continual introduction of young members, so that the unsoundness of their T. has remained unnoticed.

As a guide, then, and a safeguard to the ignorant, it has often been suggested, and was pressed upon the Committee by some of the witnesses, that the Gov. should cause model T. to be constructed, and should enforce an adherence to them; but as the circumstances of human life, differing according to locality, occupation and treatment, are so various, and the T. prepared by actuaries of high standing are by no means alike, your Committee cannot recommend that the Gov. should undertake to issue any such model T., or to guarantee any such assurances; and they think the Legis. should continue, as heretofore, to leave each So. the responsibility of adopting such T. as may be chosen and agreed upon by its own members.

When a So. has provided itself with T. under the sanction of a competent act. and has obtained a certificate from the Registrar that he has duly enrolled it, such So. is taken under the cognizance of the law and acquires certain privileges.

The Committee proceed to enumerate these, viz.—1. That they may sue and be sued in the name of some officer of their body. 2. That their rules can be legally enforced. 3. That Justices may punish summarily fraud amongst the members. 4. That their property is vested in trustees. 5. That their money may be placed in savings banks; some having also the privilege of investing their funds with the Commissioners for the Reduction of the National Debt at a high rate of int. 6. That their documents are to be exempt from stamp duty. 7. That they may claim priority of debts in case any officer of their So. should become bankrupt, or should die. 8. That in case of death of members, payment may be made by a So. of any sums not exceeding £20 without letters of administration. 9. That their members are allowed to be witnesses in all proceedings respecting the property of a So. 10. That the Registrar may order trans. of stock, if the person in whose name it stands should be out of England.—This is the concentrated result of half a century's legislation.

In return for these and other advantages, and for the greater security of the members, the Legislature has required all enrolled Sos. to make an ann. report of their accounts for the use of their members; and every five years to transmit to the Registrar a further statement of the rate of sickness and mort. experienced by them in that period, together with a valuation of their assets and liabilities. The Committee add :

But these annual reports of accounts being confined to the members are not available for public information; the T. certified by an actuary are often at variance with the rules sanctioned by the Registrar, and the rules are often so obscurely worded that it is difficult to put a legal construction upon them; and it is apprehended that the quinquennial valuations, when they shall be sent in, will be found likewise so defective that they will be of little or no use, either as an index of solvency, or as a source of statistical information. . . .

The Bill as introduced into the House *related only to enrolled Sos.*; but in the course of the inquiry an important subject has come under the consideration of the Committee, namely, whether it might not be desirable to take the present opportunity of affording legal protection to the very large class of Sos. which are not enrolled.

The Rep. then enumerates the several causes which had conduced to prevent these Sos. from seeking or obtaining enrolment, as follows :

1. The greater part of them use T. of contributions and benefits which an actuary could not certify to be safe. 2. The members of many of them have an unfounded but general fear lest the man. of their own affairs, or of their money, would be taken out of their hands by the State, if they were enrolled. 3. Many of the small local clubs, estab. by publicans for the sake of their own profits, are managed by them for this object chiefly; and their members inquire little whether their constitution is sound or not. 4. A large body of them *employ secret signs* at their meetings for the avowed purpose of guarding against imposition, and thus incidentally are brought within the terms of the Corresponding Sos. Acts, and are illegal.

Your Committee, however, are of opinion that Sos. estab. for benevolent and praiseworthy purposes, which more or less accomplish their objects, and of which the members really desire to perform their engagements to each other equitably, should not remain altogether excluded from the protection of the law, and so be exposed, as very frequently happens, to imposition and embezzlement of their funds, without any practical remedy. And in regard to the use of *secret signs*, however objectionable they may be if they really attain the object of concealment, and undesirable if they fail in securing it, yet, provided the So. which uses them is founded for charitable and benevolent purposes only, your Committee see no reason why the exemption from the Corresponding Sos. Acts which was made in favour of Freemasons, on the ground of the charitable object of their Order, should not be extended to such F. Sos. (by whatever name they may be called) as long as they justify the confidence of Parl. by banishing from their meetings whatever may be offered against religion, morality, good order, and the laws and constitution of the country.

Your Committee accordingly recommend, that besides the class of F. Sos. who possess under former Acts the privileges of enrolment, a new class should be formed to whom the Registrar should be authorized to give a certificate of regis.: that in this case the certificate of an actuary should be dispensed with, and that they should be exempted from the operation of the Corresponding Sos. Acts, provided they adhere strictly to legal and benevolent objects, which must be distinctly stated in their rules: that they should be required to furnish to the Registrar an ann. return of their accounts, and that the right of suing and being sued in the name of one of their officers should be granted to them.

Your Committee recommend that the fee payable upon regis. should be the same amount as that payable upon enrolment: and that in the case of Sos. which have branches (by whatever name they may be called), a list of all, and the places where they are estab., shall be sent to the Registrar, to be entered on his register, and that a fee of *2s. 6d.* shall be paid for the entry of each of these.

The Committee considered there should be embodied in the Bill provisions to the following effect:

1. To enact that it should not be lawful for any member to claim any allowance while his contributions are in arrear.

2. In case any person should insure in more than one F. So. for an allowance in sickness, to suspend any benefit arising from the first-made ins. until he shall have given notice to the officers or trustees of every such So., and obtained their consent in writing.

3. To declare that the terms of division of funds shall be made with the sanction of the Registrar, and any transactions between the officers of the So. and any of its members, for buying up his claims, shall be made with the consent of a Justice.

4. To prohibit any ins. on the life of a minor between 6 and 15 years of age beyond £5, and in every case of death, at any age, to require a certificate, in the form set forth in the schedule, from the medical attendant, or if there has been no medical attendant, from some householder.

5. To require a copy of the rules and certificate of enrolment or register to be hung up in the place of meeting of every So. during the time of its meetings.

6. To allow the Registrar to give certificate of regis. to Sos. having for their objects the relief, maintenance, or endowment of members, their husbands, wives, children, kindred, or nominees in infancy, old age, sickness, widowhood, or any other natural state, although the prob. might not be calculated by way of average.

Every certificate of the Registrar to have words inserted at the foot of it to correct any opinion that the Gov. guarantees the stability of the So. The Rep. continues:

Many minor abuses have been detailed to your Committee, and suggestions made for interference by stat. But your Committee believe the honesty and growing intelligence of the people will gradually apply the most effectual remedy to these: whereas, by interfering in details, Parl. would incur the risk of shaking the principle of independence and self-management upon which all voluntary Asso. depend.

But your Committee think that it is desirable that the Gov. should offer facilities at a cheap rate to members of F. Sos. for obtaining from some authorized department such information as can be afforded on the true condition of their accounts and prospects, and advise how to correct and re-estab. defective rules and T.; and they suggest that the Registrar should not confine himself to the functions of enrolling and regis., but should undertake the add. duties which this Bill will devolve upon him; *should see that the words of every rule are such as will carry into effect its meaning, and such as may be legally enforced; and generally bring under effective inspection and administration the audit of accounts, the examination of returns, and the business of affording aid and counsel to every So. which may apply to him for assistance.*

In conclusion, it has been strongly urged that it would be advisable to consolidate the whole law relating to F. Sos. This may be a very fitting work to be undertaken next year: in the meantime the provisions of the Bill, as suggested by your Committee in the Appendix to their Rep., are such as they think the Ho. should take into immediate consideration, both in order to render more efficient the laws actually existing on the subject of these Sos., and to extend the benefits of them to a numerous class at present excluded.

We need not stay to examine the clauses of the Bill as amended by the Committee, because we shall deal with them so far as they were adopted by Parl. in the Act of 1850. We have, however, to review the evidence of several of the witnesses examined, in so far as it may throw light not fully reflected in the Rep.

Mr. Neison was the first witness called:

6. Will you state to the Committee what is the general result of your experience as to the sufficiency

of the T. of F. Sos. ?—That would require me to consider two classes of F. Sos. I believe F. Sos. they existed until a recent date were generally unsound, and chiefly so from an inadequate amount of contributions being required by their T., at least by those having T. Many of the Sos. still have T., but the Committee are no doubt aware that the 9 & 10 Vict. (1846) makes it compulsory on Sos. estab. after the passing of that Act to have T. approved of by competent authorities. To explain fully the reason why F. Sos. have been so unfortunate in acting upon inadequate terms would require rather a long disquisition. It, however, may be summed up in a very few words. The subject of F. Sos. is altogether a very complicated one; in fact there is no Vital Sta. so difficult to be understood. A very slight consideration of the nature of those Sos. will make it apparent that a very large amount of data is necessary in order to arrive at anything like sound deductions calculated to be of use to F. Sos. Up to the year 1824 there did exist no data of much value to F. Sos.; absolutely nothing as regards to the element of sickness, which is one of great importance to them. About the year 1820 the Highland So. of Scotland offered prizes for returns of sickness and mort. experienced amongst the Benefit Sos. of Scotland. A considerable number of returns were obtained from these Sos.,—between 70 and 80—and an analysis of these returns was published by the H. So. in 1824. All Sos. established subsequent to that date, or for a few years subsequent to that date, were guided by the experience or the results of that analysis; and many Sos. up to the present time base their calculations upon that data. It should be mentioned in conjunction with this, however, that Dr. Price, about the end of the last century, feeling the want of a data upon sickness, adopted an hypothesis as a substitute; but the results of the analysis of the Highland So. showed a much less amount of sickness than would have resulted from the hypothesis adopted by Dr. Price in connexion with this question; yet so great was the confidence reposed in Dr. Price's hypothesis, that many were led to doubt as to the safety of relying upon the results of the analysis by the Highland So.'s Committee.

A Committee of the House of Commons was appointed to consider the general question of F. Sos. 2 or 3 years afterwards, and considerable doubt was thrown by them upon the value of the returns made by the H. So.; but on a closer investigation, which never assumed any official form, it was soon explained why the very low rate of sickness indicated by the H. So.'s returns appeared. *Sos. in Scotland up to that time were almost purely of a charitable character, and when members belonging to the Sos. fell sick, it was not their habit to place themselves on the funds of the So.; they did not do so unless their circumstances compelled them to have recourse to the funds of the So.; and consequently the books of the So. did not contain a record of the real amount of sickness experienced by the members, but only the amount of money which had been paid to such members who, from their means or otherwise, were compelled to have recourse to the funds of the So. A careful reading of the able Rep. by the H. So. Committee of that period will establish this. [A careful reading of the Rep. also showed that this defect had been foreseen in taking out the experience, and was corrected, p. 44.] It should likewise be stated that there are only a very few Sos. to which anything like recent calculations strictly apply. Sos. as they then existed very generally had peculiar features in their regulations. Some of these Sos. you will find, from an abstract given in the same Rep., did not allow any benefit in sickness unless the members were first 2 weeks ill. Members being 2 weeks invalidated, or in want of employment, could then make application. However, the general rule of F. Sos. at the present day, or at least F. Sos. recently estab., is to grant relief in sickness from the first day of illness until recovery, but it is sometimes modified in this way—that if illness only continues 24 hours, or in some cases 2 or 3 days, then no application is made; but when application is made, it will date from the orig. period of illness or incapacity to follow their occupation. . . .*

11. The Highland So.'s analysis would not be applicable, without the exception you have stated, as a rule for F. Sos. of the present day?—Certainly not. *I am very glad to say that the F. Sos. of the present day have nothing of the merely charitable feature about them, and the Legislature seems to have taken this view of the matter also. You will find by a recent enactment that everything that looks like charity or benevolence is discarded from the enactment. Members of F. Sos. on entering are recognized as having a right on the various contingencies happening to a claim on the fund; and so fully is this recognized by many Sos. that they positively impose penalties on members during sickness, unless they claim and receive the benefits which are provided for them.*

I have come up to the period [1825] at which the Committee of the Ho. of Commons considered the matter and reported unfavourably to the applicability of the returns of the Highland So. for the purpose of F. Sos. as they then existed. Two or three years subsequent to this the So. for the Diffusion of Useful Knowledge issued schedules to Sos. in Eng. requiring returns on the rate of sickness. These schedules on being received were submitted to Mr. Ansell, who pub. a very valuable analysis of them, but the results of the inquiry showed a much greater rate of sickness to prevail among F. Sos. than that indicated by the H. So.'s analysis; but it should be stated that those schedules were very partial in their distribution. You will find on referring to his work on the subject, that they include 24,000 years of life: that is all the years of life lived during the periods of observation. The inquiry related to Sos. for a period of 5 years: so that on the average the obs. extended over about 5000 members for a period of 5 years. You will also find that very few of those members were above 70 years of age, and therefore, so far as the limited experience of the data laid before Mr. Ansell went, it had reference only up to that period of life; and it can be very easily shown that nearly all the difference in the various estimates of the amount of sickness has chiefly reference to an advanced period of life; and to get over the difficulty which seems to exist among authorities in the matter of sickness, various expedients—some of them of a most beneficial character, as bearing upon the state of F. Sos.—have been resorted to; but still Mr. Ansell's data showed a much larger amount of sickness than that of the Highland So.

12. And less than Dr. Price's?—Yes, also less than Dr. Price's hypothesis, except at advanced ages. Nothing further, that I am aware of, any importance was done in investigating the rate of sickness until the year 1846. I was at that period desirous of seeing the real explanation of the distinction between the Highland So.'s data and that of Mr. Ansell; I was anxious, moreover, to solve the problem *whether the physical condition of the people of Scot. was such as to show a less amount of sickness*; and I sent schedules to the parish clergymen in Scotland, requesting them to use their influence with the neighbouring Sos., and get returns of sickness for a period of 10 years; but I was quite disappointed in obtaining returns in that manner. I received only 3 altogether. Not wishing to relinquish the subject, a Committee of the Statistical So. of Lond. was appointed to consider the matter of F. Sos. A great deal of attention had been given by the Statis. So. to V. Statis. up to that period; and this question assuming a most important aspect, bearing directly on the condition of the people, I was still anxious to solve the orig. problem I had undertaken in 1840; and under the advice of the Committee I offered prizes for the best returns from Scotch Sos. The effect of these prizes was to get a very considerable number of most valuable returns, extending over a period of 12 years in the various Sos. making those returns. And at the same time, through the kindness of Mr. Tidd Pratt, I was enabled to get possession of the Gov. returns. The Committee should understand that at the period I am now speaking of the F. Sos. Acts required that every F. So. enrolled should make a return of its amount of sickness and mort. for the preceding 5 years. *Nothing had ever been done with these returns*; the general opinion amongst those who had any interest in analyzing them was, that they were so imperfect and so badly made, that they could be of little value. A great number of them were entirely useless for any exact purpose; but still great numbers were admirably done. They

contained internal evidence of their accuracy: add, labour only was required to apply the test usually applicable to such returns, to see whether they were accurate or not. A period of about 3 years was spent in analyzing these returns: and the result of that analysis has been pub., showing a much greater amount of sickness than resulted from the inquiries of the So. for the Diffusion of Useful Knowledge, or from the Highland So.; and in fact approximating very closely to the results which would have been arrived at by Dr. Price's hypothesis only for the aggregate of ages under 55 or 60.

Then, having in view the purport of the orig. question, it will appear from this explanation, *that it is no wonder that until a recent period F. Soss. were found to be exacting inadequate contributions for the benefits they promised.* The difference is very remarkable, and for some particular kinds of benefit which are provided for by F. Sos. adopting one data, and adopting the more recent data resulting from my own investigation, it came under my own inquiry that the contributions necessary for some purposes would be doubled in consequence. So that F. Sos. estab. 20 or 30 years ago upon inadequate data may now, on investigation, find that they had all along been charging one-half less for some of the particular benefits than they ought to have charged; and many Sos. have proved this by experience. They have broken down in consequence of inadequate contributions. Some Sos. being alarmed by a gradual deficiency taking place year after year in their funds, have had recourse to a great many expedients by which to prop themselves up. One of these expedients, which certainly tends to destroy the real purpose of F. Sos., has been adopted for a long time, by a vast number of F. Sos., and it is this—after sickness has continued so many weeks, there is a rule declaring that then the sick allowance shall be reduced to perhaps one-half that with which it started; and after so many more weeks it shall be reduced to a quarter.

Any one looking into the orig. constitution of F. Sos., a century or half a century ago, when a great deal of attention was given to them by Mr. Rose and others, will find that no such rules then existed: that a certain allowance was made during sickness, and such as was thought commensurate to keep members from falling into pauperism. . . .

Mr. Neison continued to illustrate this point, and some others of importance; as, for instance, the effect of hon. members—when not eliminated from the returns of members before averaging the sickness experience of a So. over the number of its members—in reducing the apparent amount of sickness suffered on an average. They not having claimed any benefit, the aggregate sickness has necessarily to be assessed amongst the small number, there being in consequence a greater proportion for each (46, 47, etc.). He also spoke of objections applicable to "General Sos.," viz. that they might draw their members from districts or occupations not orig. contemplated in selecting the T. for the operations of the So. (119, 125). Then the following:

154. You think that the want of uniformity [in the T. of contributions of different F. Sos.] is principally caused by want of data?—Principally. I think if the data were sufficient, the actuaries would differ very little indeed. There are abundance of matters upon which they meet each other, upon which there are not two opinions; but a subject of this kind would be more open to a difference of opinion than the other routine matters coming before actuaries, the question being of a more difficult nature.

Mr. John Finlaison gave an account of the data from which he constructed his Sickness T. in 1835 [F. SOS., MORT. AND SICKNESS EXPERIENCE OF], and Mr. A. G. Finlaison gave the following evidence regarding the application of those T. to F. Sos.:

637. In those printed T. I believe the contribution which you require to insure a sum upon males up to the age of 45 is the same?—It is.

638. That is, you are of opinion that the amount of sickness incident to persons who fall sick—not taking imposition into account—up to the age 45 is nearly the same?—No; I am not prepared to say that; but I am prepared to sanction contributions which between the age of 20 and 45, or 18 and 45, shall be sufficient to keep the So. in a state of solvency; but I by no means wish it to be inferred that we see no distinction between the ages of 20 and 45, and 20 and 25; it is only in that *large class* of Sos. I apply it, and under those regulations that we give one common contribution. *From the inspection of cases that have come under our notice in the last few years, amounting to some hundred, no less than 82 p.c. upon our books consist of Sos. that are governed by one common rate of contribution, and only 18 p.c. have applied for anything that can be called a graduated T.; and of those 18 not half are graduated according to age.*

639. Do you not consider that it is necessary to have a graduated T. between 18 and 45?—I consider it desirable if they will accept it, but they do not consider it necessary for the solvency of those Sos.

640. Then I understand you to say that although scientifically it is most desirable to have a graduation of payment according to age, between 20 and 45, yet for practical purposes you find it sufficient to take the average?—For practical purposes in that class of clubs it is sufficient.

641. Above the age of 45 you are in the habit of giving a graduated scale?—It is very rarely applied for; there is not one case in a 100.

642. What practically then is your course?—The Sos. that apply to us for graduated T. above 45 years of age are very few; and in any case where they ask for them, we are ready to advise them upon that point.

643. In case a So. applies to you to calculate T. for them for sickness, how do you deal with the age above 45?—We calculate them by the ordinary means.

644. Do you give them T. in which the contribution varies from year to year, or quinquennially; or do you take them at longer periods?—Those Sos. that take contributions above the age of 45 have them graduated from year to year; and when the contribution is for life, they are ordinarily carried up as high as 55; above that age they become so heavy, that practically they are of no use to the So., no member being able to pay the rates. . . .

Is it your opinion that it would be safe to apply any T. to Sos. under the amount of 150 [members]?—Yes; there is more vigilant supervision in small Sos.; the health of the members and other circumstances are better known each to the other; and I have no reason to think that Sos. under 100 are less prosperous than those with large numbers; in fact I am inclined to think that they are better man. on the point of sickness.

649. Can you suggest to the Committee any means of insuring a greater soundness amongst the great body of the F. Sos. in the kingdom by any legislative enactment?—No; I think I can suggest no other means than that of starting them well, with sound pecuniary T., and a general set of precepts for their guidance. But I think there is great danger in interfering with them too much, especially by over-patronizing them, and interfering in their man.: because when they are much taken care of by the gentry, the people themselves come to look upon the inst. as a thing which is not altogether their own, and which they may apply to much more readily than if it was in their own hands. I think that they consider that their interests are not well kept: for they consider that the interests of the So. and their own are distinct.

650. Are you able to give us any information as to the mode of management, whether bad or good,

amongst the Sos. for which you have calculated T.?—I have no other means than that which I gather from their correspondence, and interviews with some of them. I think the rural Sos. which are at large, in which the clergyman of the parish takes an interest, without interfering with them much, are about the best managed. But I have found Sos. in Lond., consisting of mechanics, that have existed for 50 years, and have been always in a prosperous state, and have thriven equally; but I am not able to trace their success to any other cause than that of great discretion on the part of the directors or managers of the So.; and I do not think it depends so mainly on the T.

The Rev. J. Hodgson (founder of *Clergy Mut.*) gave evidence before this Committee. He had taken an active part in the man. of a F. So. An important meeting was about to be held in view of the formation of a F. Assu. So. for the National School masters and mistresses: "and they will turn their attention to it; and they will turn their scholars' attention to it throughout the kingdom."

Mr. William Sanders, Man. of the *Birmingham Gen. Prov. and Benevolent Inst.*, gave evidence, and in reply to the question (1263) of how many F. Sos. there were in that town, answered:

I should say considerably above 1000. Dr. Darwell made a calculation for some statistical purpose years ago, and then they were 800. I calculate them now in this way: there are about 1700 public houses and beer-shops, and it would be, I think, near the mark to say that 2 out of every 3 have one of these Sos., and some have 5 or 6. . . .

1264. Out of the 1000 F. Sos. in Birmingham how many do you think hold their meetings in public houses?—The great majority: there is now one, I think, in almost every church and chapel school-room in the borough; but that is chiefly the result of our education. . . .

1282. Are you aware what number of *Burial* Sos. you have in Birmingham?—No; although I have thought upon the subject. One of the alterations introduced in our rules . . . not allowing parties to receive more than half the funeral money if they died within a given period; and allowing no money on the death of the wife or husband, if the party dies in less than 2 years. We have found this law to operate very beneficially; and we have had reason to suppose that parties who would have joined from fraud have been deterred, knowing that they would not get the funeral money, if the wife or husband died within 2 years. And that this view is correct is supported by the fact that the rate of mort. among wives in another So. was in the proportion of 3 wives to 2 male members; and when you consider that there must be a number of bachelors and a number of widowers, and that female life is longer than male, it is scarcely possible that it could be attributed to fair play. In 5 years there were 32 wives, and I think only 22 male deaths.

1283. Was it in a *Burial* So. that this happened?—No; an enrolled Sick So. giving £8 upon the death of a wife; a larger sum than most other Sos. in proportion to the male funeral money!

Mr. Thomas Barlow, a coach-builder from Birmingham, who had a large acquaintance with F. Sos. in that borough, was examined:

1491. What is your experience with regard to the breaking up of clubs, and the effect produced by it?—They have almost universally broken up, I may say, in all parts of the country, and the effects have been very disastrous. Out of a total of 152 men that were examined in our own workhouse by the Rev. William Gover, he found that 79 had been in sick clubs, that had all broken up and failed at the time that the members required their assistance. . . . (See 1867.)

Mr. Edward Rushton, Stipendiary Magistrate for the Borough of *Liverpool*, was called and examined:

2346. Are there Secret Sos. [in *Liverpool*] besides those generally known by the name of Odd Fellows, Druids, and Foresters?—There have been. I do not know that there are at this time Ribband Sos.; there are a great many Orange Lodges in *Liverpool*.

2347. They of course are not recognized by law?—No. The Orange Clubs are generally Benefit Sos.; they are recognized in that way; but the Secret Sos. of the nature of Ribband Sos. are not recognized. I will give an instance in my own experience, which led me to a knowledge of them. A man was summoned, an officer of a So. held at a public-house. . . . They summoned him for relief. He stated that they had no money in the box; the claimant replied, "But you had money in the box last week, because you gave £7 10s. to get bail for those men in *Ireland*." I immediately began to inquire about this, and I discovered that this was a So. formed in connexion with certain Sos. in *Ireland*; and that these men had been bailed, or attempted to be bailed, who had been guilty of some crime in *Ireland*, the precise nature of which now I do not remember; but it was clearly a So., being ostensibly a Benefit So., and having a secret committee; it was an illegal So. I, of course, made an award for the sick man's money, and cautioned the publican that he would get into trouble if this were continued. Subsequent events led us to inquire further, and I found that these Sos. at one time were very prevalent. I do not think they are now.

2348. The time when they were prominent was, I suppose, two or three years ago, when there were disturbances in *Ireland*?—Yes; they may exist still, but not in activity, certainly. . . .

2368. Do you think it a bad state of things, where Secret Sos. are appended to F. Sos., and these Secret Sos. are used for political purposes, as in the instance you spoke of in *Ireland*, if the Law is not put in force?—I think it undoubtedly is very dangerous at certain times; we were in great danger from Secret Sos. in the town of *Liverpool* certainly.

Mr. John Tidd Pratt, Registrar of F. Sos., was called. He said in his evidence that the number of F. Sos. he had enrolled since 1828 was between 14,000 and 15,000, "but how many of these are now in existence I cannot say. In my opinion the number that are not enrolled exceeds the number that are enrolled." By way of explanation he said he thought the number of Sos. actually enrolled now was about 12,000. This would give more than 24,000 Sos.

Mr. John Finlaison said before the same Committee that he thought the enrolled and unenrolled Sos. were "something short of 20,000."

Mr. Neison said he thought the number of members of F. Sos. was about 2,000,000. (See 1801-2 and 1854.)

Mr. Scratchley, in his work on *Industrial Investments* (pub. 1851), stated the number of enrolled Sos. in 1849 to have been 10,433, numbering 1,600,000 members, with an ann. revenue of £2,800,000, and aggregate accumulated funds reaching £6,400,000. He next reviews the unenrolled Sos., referring more particularly to the Odd Fellows, Foresters, Druids, etc.; and finally makes the total number of F. Sos. reach 33,223, with

3,052,000 members, whose ann. subs. reached £4,980,000; and whose aggregate accumulated funds amounted to £11,360,000. (See 1851 and 1874.)

Mr. Alfred Burt gave in his work on Life Ins. a chapter "On the Origin, Progress, and Defects of F. Sos."

Mr. Josiah Bates pub.: *Obs. on F. Sos., pointing out the Erroneous Principles on which the Generality are Founded; and setting forth the Advantages to be Derived from an Inst. Estab. on a Sound and Comprehensive Basis. Being the Substance of a Paper read at a Meeting convened to Consider the Propriety of Estab. the U. K. Provident Asso.*

There was this year founded in Lond. the *Railway Guards' Universal F. So.* In 1875 the So. had 1351 members, with an accumulated fund of £17,284. If frequent railway travelling be injurious to the nervous system, as some medical men have asserted, the fact should become apparent in the experience of this So.

1850.—There was enacted 13 & 14 Vict. c. 115—*An Act to consolidate and amend the Laws relating to F. Sos.*—which recites:

"Whereas many Sos. have been estab. in Gt. Brit. and Ireland for the purpose of affording relief and maintenance to the members thereof in sickness, old age, or infirmity, and for other purposes of a provident and benevolent nature; and it is expedient to amend the laws relating to such F. Sos., and to make further provision for the protection of the members against fraud and misapplication of their funds, and to consolidate the same in one Act." It then repeals the Acts of 1829, 1832, 1834, 1840, and 1846.

The Act proceeds to state the *objects* for which F. Sos. might be estab., which were the same as those of the Act of 1846, with the add.: (5) "For the purpose of enabling any member, or the husband, wife, or children, or nominee, of such member, to *emigrate*." While the general clause was altered as follows: (6) "For any purpose which shall be certified to be legal in E. and W. by H. M.'s Attorney-Gen., or in *Scot.* by the Lord Advocate, as a purpose to which the power and facilities of this Act ought to be extended." The word "nominees" no longer appeared amongst the persons to be benefited (see later s. 42).

There was an important *limitation* as follows: "Provided always that it shall not be lawful for any So. or *Branch* estab. under this Act to assure the payment to or on the death of any member, or on any contingency, or for any of the purposes for which the payment of sums may be assured under this Act, of any sum exceeding £100; nor any annu. exceeding £30 p.a.; nor a sum in sickness exceeding 20s. p. week." And by sec. 37 it was enacted that a member belonging to several Sos. should not be entitled to claim *in the aggregate* more than those sums so limited.

It is most important to notice that under this Act for the first time "*Branch Sos.*" might be regis. This was a concession in favour of the *Affiliated* Sos. The rules of a Branch So. might be regis. quite irrespective of the fact of whether the rules of the Parent So. were regis. or likely to be. It was necessary, of course, that the rules of the Branch be in conformity with the law on all points.

By the Act of 1846 the ins. of sums of money on the lives of *children* under 6 years of age had been prohibited. It was now enacted (s. 3) that no So. estab. under the provisions of this Act should insure any sum to be paid upon the death of a child under 10, whether a member of the So. or not, "except the actual funeral expenses, not exceeding £3, . . . to be paid to the undertaker or person by whom the burial is conducted, and whose receipt alone shall be sufficient discharge to the So." And by the same sec. no money whatever was to be paid in respect of any member, infant or adult, without the production of a *certificate* of surgeon, etc., or coroner, certifying cause of death; and that such cause was not attributed to "poison, violence, or criminal neglect."

By sec. 7 an important distinction is set up between "*Certified*" Sos., *i.e.* those having their rules and tables "certified under the hand of the Act. to the Commissioners for Reduction of the National Debt, or by some other Act. who shall have been for more than 5 years an Act. of some Life Assu. Co. estab. in Lond. Edin. or Dublin," in the form set forth in the schedule; and "*Registered*" Sos. merely, *i.e.* those having their rules, etc., regis. without any actuarial certificate of their sufficiency for the purposes contemplated. But sec. 8 renders it imperative upon all Sos. granting annu. to have the T. of contributions for such annu., whether deferred or immediate, certified. Fee for regis. 2s. 6d.

The range of securities in which Trustees of F. Sos. might invest funds were extended, and now embraced *East India*, and Bank stocks, local rates, etc. (s. 12). Appointment of Trustees to be forwarded to Registrar (13).

Sec. 17 was as follows:

And whereas it is desirable for the better security of F. Sos. that correct calculations of T. of payment and allowances dependent on the duration of sickness and the prob. of human life should be constructed for their assistance: and it is expedient to collect data and facts resulting from the experience of such Sos. from time to time, for the purpose of correcting such calculations;—Be it enacted: That the trustees or other officers of every So. or Branch estab. under the provisions of this Act, in which any benefits are assured for an allowance in sickness, an annuity deferred or immediate, or a sum to be paid on death, shall within 3 months after the expiration of the month of Dec. 1855, and so again within 3 months after the expiration of every five years succeeding, transmit to the Registrar a return of the rate of sickness and mortality experienced by the So. or Branch within the

preceding 5 years, in such form as shall be prepared for that purpose and furnished to the trustees of every such So. or Branch, by the said Registrar, under the direction of one of H.M.'s Principal Sec. of State.

And the Regis. was to prepare an abstract of all such returns to lay before Parl. (s. 18). The Acts of 1799 and 1819 were not to extend to any So. or Branch So. enrolled under this Act. This was so in the Act of 1846, but the circumstances surrounding the exemption were much more specific than they had been then, viz. the said Acts should "not extend to any So. or Branch estab. under this Act in which benefits are assured to the members depending on the laws of sickness or mort., or to any meeting of the members or officers thereof, in which So. or Branch, or at which meeting no bus. whatever is transacted other than that which directly and immediately relates to the objects of the So. or Branch as declared in the rules thereof, as they are set forth in the certified copy thereof: *Provided always that the Trustees or other officers of such So. or Branch, when required under the hand of two of H. M.'s Justices of the Peace, shall give full information to such Justices of the nature, objects, proceedings and practices of such So. or Branch, and in default thereof the provisions of the said recited Acts shall be in force with regard to such So. or Branch*" (21).

Arbitrators or Justices acting under the powers of this Act might direct expelled members to be reinstated or might award compensation in default (25). Orders of Justices to be final and not removable into Court of Law (27). In any proceedings before the Registrar of Friendly Sos. he might inspect books and administer oaths (29). Member of a So. might be a witness (32). Minors might be members, but not hold office (33). In case of members dying *intestate*, trustees might pay any benefit not exceeding £50 to persons who might appear to them to be entitled. Next-of-kin to have remedy against receiver (41). After passing of this Act payment of benefits insured on death of members to be made to executors, etc., and *not to nominees* (42). Existing F. Sos. were not, after passing of this Act, to invest with Commissioners of National Debt except for ins. previously made (43). Exemption from stamp duty not applicable to ins. above the limits of this Act (45). Sos. estab. under repealed Acts to have the benefits of this Act, but not hereafter to exceed the limits of this Act as to benefits insured (46).

Then follows a provision by which a large and important class of Benevolent and Charitable Sos. were admitted to legal protection, which had been previously, by the inconsiderate ignorance of our Legis. on social subjects, debarred from it:

48. And whereas several benevolent and charitable inst. and Sos. are formed by voluntary subs. and benefactions, for the purpose of relieving the physical wants and necessities of persons in distressed circumstances, and it is expedient to afford some protection to the funds thereof;—Be it therefore enacted: That if the rules of any such Inst. or So. and all alterations and amendments thereof, shall be registered under the provisions of this Act, then and in that case the clauses and provisions herein contained, so far as the same relate to the giving of security from any treasurer or other officer or person, and to the vesting of the effects in the trustees for the time being, and to their suing and being sued, and as to the liability of the treasurer or trustee, or other officer, and to the protecting, securing, or recovering the funds vested or being in such treasurer or trustees, and for enforcing the rendering of accounts by him or them, shall be extended to all and every such inst. or So., which shall have and enjoy and be entitled to the benefits of this Act, with respect to the several matters aforesaid, as fully and effectually as any F. So. or Branch regis. under this Act can or may have or enjoy the same.

The Act was only to remain in force one year; but it was continued by the 15 & 16 Vict. c. 65 of the following session.

There was this year pub. an important work: *Obs. on the Rate of Mort. and Sickness existing among F. Sos. particularized for various Trades, Occupations, and Localities; with a Series of T. showing the Value of Annu., Sick Gift, Assu. for Death, and Contributions to be paid equivalent thereto: calculated from the Experience of the Members composing the Manchester Unity of the Independent Order of Odd Fellows*; by Henry Ratcliffe, Corresponding Sec. The author says in his preface:

Some years have elapsed since it was first attempted to obtain statistical information from the Lodges of the *Manchester Unity*. As might have been expected, every proposition was at first strenuously resisted, which had for its object the attainment of such information as alone could be relied upon as a safe guide to the successful financial man. of so vast a body; the leaders of which were anxious to secure its permanent ability as a prov. asso., by the application of every measure which the *experience of the So. itself* might demonstrate to be necessary to insure its safety.

At length the unanswerable arguments advanced by those desirous of profiting by past experience prevailed, and in the year 1846 it was determined that we should no longer decline to understand our true position; but that we should unhesitatingly avail ourselves of the advantages we possessed of acquiring information so practically valuable, upon a subject of the deepest interest to those whose position in life rendered it necessary that they should make provision to mitigate the consequences arising from the loss of employment through sickness; and to ward off as far as possible that poverty which is too frequently the companion of declining years.

It may not be out of place to remark that the passing of the F. Sos. Bill [Act] almost simultaneously with the appearance of this work, has rendered it highly prob. that in a few months the *Manchester Unity* as a legalized asso. will enjoy the full security of the law for the protection of its accumulated cap. . . .

The T. and calculations are given in as simple and plain a manner as the subjects would permit; and it is to be hoped that, by careful attention, they will be fully understood by the great mass of persons interested in the welfare of F. Sos., and that the object sought to be gained by this prob. will thus be fully realized.

The T. as also the details of the mode of collecting and checking the data will be given under F. Sos., MORT. AND SICKNESS EXPERIENCE OF.

A paper was read before the Brit. Asso. this year by Mr. Neison: *Mort. of the Provident Classes in this Country and on the Continent*, wherein some of the statistics already passed under review are given, with others mentioned in other parts of this work. An abstract of the paper appears in the Trans. of the Asso. for this year. The paper itself in a more complete form appears in the Journ. of the Statistical So. of Lond., vol. xiii. p. 313.

Mr. Arthur Scratchley, M.A., pub.: *A Short Treatise on the Formation of F. Sos. under the new Act of Parl. (1850) relating thereto*. A great deal of useful information was contained therein.

Among the other pub. of the year were: 1. Mr. W. T. Thomson: *Obs. on the Formation of F. Sos.* 2. Mr. T. Sopwith: *The Sound Principles of F. Sos.* 3. *Mort. Experience of the Builders So.*, by Thomas Piper. 4. *Rep. on the Preston District of Odd Fellows.* 5. A pamph. by Mr. G. Greig: *Are F. Sos., Secret Orders, etc., Safe? Answer, No!*

Mr. Wm. Paterson, Barrister-at-Law, pub. *The New Friendly Sos. Act, 13 & 14 Vict. c. 115, with Introduction, Notes, and a Copious Index*. This was a useful little book at the date of pub.

Royal Liver.—An event of this year was the founding of the *Royal Liver F. So. at Liverpool*. It is in its main features a Burial So.—that is, it insures sums payable at death, ostensibly for the purpose of funeral expenses. But it has, or had, a sickness branch. The growth of the So. has been rapid beyond all precedent. It is an enrolled So. [See *Loyal Philanthropic F. So. 1844.*]

The man. of the So. is nominally representative; but in practice it appears to be despotic. The "collectors" appear to control the voting power.

By 1863 the So. had 80,000 members; the income of its burial branch was £77,315; of its sickness branch £3746 only. Its expenses of man. were then very heavy.

By 1865 its income was £106,471.

The following figures give an outline of its financial condition and progress down to 1867; at which date the So. had paid for 65,095 funerals of its members; and in add. had made 10,389 grants in respect of members not legally entitled to benefit.

Funeral Allowances and Grants to Members.	Sick Pay, Doctors' Allowances, etc.	Total.	Yearly Increase of Profits over Expenditure.	Amount of Reserve.
1860				£ 15,272
1861 £ 8,810 15 0	£ 1549 5 5	£ 10,360 0 5	£ 2,732	18,004
1862 23,469 5 0	2731 13 0	26,700 18 0	7,625	25,630
1863 31,746 13 3	2963 11 9	24,710 5 0	13,405	39,036
1864 41,470 12 2	3544 6 11	45,014 19 1	16,423	55,460
1865 47,309 18 5	3634 7 8	50,944 6 1	22,566	78,026
1866 56,712 6 9	3321 7 3	60,033 14 0	25,328	103,355
1867 65,526 2 9	3218 0 0	68,744 2 9	29,017	132,372
		296,008 5 4		

The accounts are made up 30th June each year.

In 1868 the So. spent a considerable sum in opposing Lord Lichfield's Bill in Parl. this year. (See 1868.) This year too Mr. Bretherton pub. a pamph. on the affairs of the So.

About this date Mr. T. B. Sprague, M.A., made an investigation into the London bus. of the So.; and as a result became "thoroughly satisfied the So. was perfectly sound and solvent," vide evidence before F. Sos. Commission, 1870, Second Rep. part 2, p. 84. There was printed a document: *Mr. Sprague's Second Rep.*, wherein he advises upon a course to be pursued in view of getting the registers of the So. into a more perfect form.

By 1870 the So. had 550,000 members, "scattered all over the kingdom," with some in *America and Canada*. The income was then £164,402; its assets £220,120.

During this year the So. adopted some new rules, among which was the following, allowing the Committee of Man.—

To apply for or oppose any Bill or proceeding in, or emanating from Parl. which they consider desirable for the interest of the So. They shall also do all other acts and things whatsoever to the best of their judgment are necessary for the management and general welfare of the said So., and the direction, management, and government of the officers and servants of the said So., save and except as they may be restricted or governed by any rule hereinafter set forth, etc.

The earlier part of the rule was understood to have reference to attempts which the managers had made to secure Parl. powers; but it is clear that it also had reference to impending opposition to the especial clas of bus. it transacts. (See 1869.)

In June, 1871, the So. had about 600,000 members. Its income from the burial branch was £176,053. Of this, 40 p.c., or £70,421, was set aside for expenses of man.; and was stated to have all been expended with the exception of £3353. This was the first year in which the details of the expenses of man. were printed. In the earlier years of the So. they had been as high as 55 p.c. Its accumulated fund at this date stood at £264,795.

The Hon. E. Lyulph Stanley, in Rep. as Assistant Commissioner (to F. Soc. Commission of 1870), pub. 1874, says, p. 28:

The *Royal Liver* has also a sick depart., but, like the other collecting Soc., it soon found it could not work this branch profitably; and as the funds have not been kept separate, a great deal has been spent from the death fund to keep alive the sick depart., in which, however, no new members are admitted—and from which all members are being rapidly excluded by the very heavy amounting now to about 3 times the regular subs., imposed according to rule, in order to meet liabilities. I see no reason to doubt that at present and for the future the affairs of the *Royal Liver* are and will be conducted with the intention of insuring efficient man. on the part of members except in the cases where family feeling on the part of the Committee interferes to shield a weak doer.

Mr. Sprague has made investigations into and valuations of other portions of the Soc. bus. since 1868, viz. in 1872 a Rep. upon the position of the "Endowment Fund" of the Soc. In 1875: *Rep. on the Mort. among the Infants whose Lives are Insured in the Royal Liver F. Soc.* And in 1876 a Valuation of the Burial Branch of the Soc.'s bus.: which we shall refer in some detail.

This last Rep. of Mr. Sprague contains information of much interest. In the first place it furnishes the following T., which may be regarded as something like a continuation of the T. already given, which only extends down to 1867. The present T., however, applies only to the "Burial Branch" of the Soc., which we see embraces the main portion of the operations of the Soc.

Table showing the Progress of the Burial Branch of the Royal Liver F. Soc. from 1869 to 1874 inclusive:

Years, etc.	Collections or Prem.	Claims and Grants.	Accumulated Fund.	Expenses.	Per-centage of expenses to Prem.
	£	£	£	£	
Year ending 30 June, 1869	157,763	76,626	176,982	60,114	38.1
" " 1870	164,403	80,959	200,120	63,295	38.5
" " 1871	176,053	89,317	223,911	65,932	37.4
" " 1872	183,222	86,428	256,216	68,777	37.4
Six months, 31 Dec. 1872	95,249	41,030	279,612	35,591	37.4
Year ending 31 Dec. 1873	192,441	89,257	318,531	74,959	39.0
" " 1874	204,937	100,604	354,882	81,738	39.9

These figures, Mr. Sprague remarks, "not only show a steady growth of the Soc.'s income, but a more rapid increase in the accumulated fund. They show that while the magnitude of the Soc.'s transactions has been steadily increasing, a substantial reserve has been made from year to year to meet the increasing liability to the members." He continues:

There are certain points, however, upon which the ann. accounts can give no information—in particular, as to the number of members on the books from time to time, the total amount of ins. on their lives, and the liability of the Soc. under those ins. If we wish to know whether the assets of the Soc. are sufficient to enable it to meet its ultimate liabilities under the ins. in force, whether the assets are increasing at a faster rate than the liabilities, whether there is at the present time a surplus of assets beyond the liabilities, or a fair prospect of such a surplus existing at a future time—for information on these and similar points, we must make what is technically known as an actuarial valuation of the liabilities.

The importance of having such a valuation periodically, made upon strict principles, was fully recognized by you in the year 1870, when the Rule quoted above was adopted; and this object has been ever since steadily kept in view. It was felt that although the accounts of receipts and expenditure pub. ann. would be sufficient to prove to the members that the Soc. is successfully and prudently managed, yet something more was necessary to prove that the Soc. is in a sound and healthy condition; and to satisfy both yourselves and your critics, whether friendly or unfriendly, that the Soc. is really in a position to fulfil its engagements, and pay its members the full benefits it has promised them.

He then proceeds to state the data which he had drawn together from the books of the Soc. in view of a valuation of the Burial Branch as at 31 Dec. 1873. There were then 643,122 insurances remaining in force upon the lives of 632,211 members. The total sum insured was £4,842,854 12s. 11d.—the contributions of the members in respect of these being £3790 2s. 7d. p. week; thus representing an ann. income of £197,628 3s. 3d. Comparing these figures with the corresponding figures at end of 1871, it was seen that during the two years the number of pol. had increased by no less than 44,045; and the increase in the total sum insured was £563,707; and the increase of the ann. prem. income £14,518.

In estimating the liability under the insurances as at 31 Dec. 1873, he had altogether excluded from consideration the insurances on the lives of children under 11. These were 178,122 in number, and insured £642,368 15s.—the weekly payments in respect of them being £714 1s. 1d., which represented an ann. prem. income of £37,232 16s. 6d. "Ins. on the lives of adults involve a liability continually increasing with the standing of the ins.; but this is not the case with these very young lives. I have, therefore, in my valuation, dealt only with ins. on the lives of members of the ages of 11 and upwards." These were 465,000 in number, insuring £4,200,485 17s. 11d.; and the weekly payments being £3076 1s. 6d.—which represents an ann. prem. income of £160,395 6s. 9d.

Valuing by a method explained in his Rep., he produced the following :

LIABILITIES—			ASSETS—		
	£	s. d.		£	s. d.
Present value of the sums ins. "and the rises" was at the above date	1,050,239	2 0	Present value of the members' contributions "or prems. payable"	1,228,460	14 0
Reserved for expenses of man. being 40 p.c. of the value of the members' contributions ...	491,384	5 7	Amount at credit of the Burial Branch	318,530	12 4
Surplus	10,543	9	Add int. outstanding and int. accrued but not yet due	5,175	14 0
	£1,552,167	0 4		£1,552,167	0 4

"The valuation therefore (says Mr. Sprague) shows a small surplus or bal. of assets over liabilities, which would have been increased if I had added to the amount of the Burial Fund the amount of arrears or prems. due by members at the end of the year. I have thought it better, however, to omit this amount, £8816 os. 9d., as it is certain that the whole of it would not be received by the So." He adds :

The existence of the above surplus, after deducting from the value of the prems the full 40 p.c. allowed for expenses, is an extremely satisfactory result; and I feel no hesitation in saying that I believe the So. is not only in a position to meet promptly all its engagements, as they mature, but that unless its progress in future should be very different from what it has been in the past, its operations will result in a gradually increasing surplus. At the present time it is evident that the surplus is not sufficiently large to justify any dealing with it; and I recommend that it be left to accumulate until it shall reach a magnitude that will enable you to take into consideration the possibility of granting some increase of benefit, to those members who shall for the longest time have belonged to the So. and shall not have received any benefit from the source next to be mentioned.

The point here referred to—and it is also referred to in the Valuation Bal. Sheet—is that of "Rises." Under No. 30 of the So.'s Rules, these attach to certain ins. effected in the year 1871, and previously. Under this scheme every ins. of £6 is increased by a rise of 10s. each year after the first, until it amounts to £10. On the 31 Dec. 1873 the total amount of such rises stood at £791,016 15s., and they were increasing at the rate of about £73,000 p.a.; "but after the year 1880, when all the ins. issued under the old scale of prem. shall have been 10 years in force, there will be no further rises. And after that date I anticipate that the surplus will rapidly increase."

The data upon which this valuation is based was drawn from the books of the So. under the superintendence of Messrs. Liversage and James Atherton. It was nearly 5 months in preparation, the average number of clerks employed on the work being 44; the total cost £1920 17s. 7d.

Mr. Sprague explains the principles upon which his valuation was based as follows : and the information will be of service to other Soss. :

The above-mentioned materials having been furnished to me, it required very little consideration to satisfy me that no annu. and assu. T. could be so suitable for determining the value of the members' benefits and contributions as those T. from which I deduced the scale of prems. now in use by you. The circumstances of your So. differ widely from those of an ordinary life ins. co. On the one hand, the rate of mort. prevailing among your members is higher than that which prevails among insured lives generally, or even among the general pop. : so that any of the ordin. Mort. T. would give an altogether incorrect view of the prob. value of your engagements. On the other hand, while it is not the practice of your So., or of any similar one, to make any allowance, by way of surrender value or return of prems., to members who voluntarily withdraw from the So. or forfeit their benefits by non-payment of the prem., it is well known that there will always be many members who, from one cause or another, will from time to time leave the So. ; and it does not seem right to leave this point out of consideration in dealing with your finances. I therefore in calculating the prems. at present charged by the So. used a Mort. T. deduced from an examination of the mort. among one section of your members, combined with int. at the rate of 4 p.c., and at the same rate made allowance on account of the continuous withdrawals among the members.

The importance of considering the effect of these withdrawals upon your finances is well shown by certain figures that have been furnished me with regard to the "reduced claims" payable during the 3 years 1871, 2, 3. Formerly when a member was more than 6 weeks in arrear in his payments, he was wholly "out of benefit" : and in case of death his representatives received only such a voluntary grant as the committee of man. thought fit to pay; but under the Rules, as altered in the year 1870, a member who is more than 6 weeks in arrear is not wholly out of benefit until a further time has elapsed, the length of which depends upon the standing of his ins. : and if he should die in the mean time, a certain proportion of his assu. is payable. . . .

It appears from these figures that in the 3 years under consideration, there was a difference of £14,049 between the full claims that would have been paid, if all the members who died had been in full benefit, and the actual amount paid, being rather more than 5 p.c. upon the full amount of the assu. becoming claims. This is in add. to any profit that may have been made by the withdrawal of other members from the So., in consequence of non-payment of their contributions.

Mr. Sprague adds : "Such then were the principles upon which I calculated your new prems. in the year 1870; and the subsequent investigations I have from time to time made of your affairs, have entirely confirmed my opinion of the safety of those principles. I have therefore no hesitation in applying them to estimate the financial position of the Burial Branch of your So., and looking at the results of this, and of previous investigations, I feel myself justified in certifying that your So. is in a thoroughly sound and satisfactory condition."

We quote this opinion so fully mainly on account of the disparaging remarks which we have too often seen regarding this So.—written, as is clear, by those who had no exact knowledge on the subject, and whose opinions, therefore, were entitled to no weight; but among the ignorant, unfortunately, unfounded aspersions sometimes carry greater

weight than the truth. We trust the So. will continue to act with prudence, and to be guided by sound advisers.

Much valuable information regarding this So. will be found in the several Reports of the Commission on F. Sos. 1870. [INFANT MORT.]

This year there was founded the *Metropolitan Typographical Widow, Orphan, or Nominee Fund*, for the relief of widows and orphans of deceased persons connected with the printing bus. The promoters had no special data to guide them in reference to the mort. to be expected from the occupations comprehended in the scope of the Asso.; and therefore the contributions were fixed very much in relation to the general average mort. of F. Sos. It was, however, prudently provided that an investigation should be from time to time made by an actuary.

At the conclusion of 5 years' experience they accordingly consulted an actuary; he found that whereas the deaths among a like number of the gen. pop. would have been 47 only, the Asso. had sustained 76.

At the end of the succeeding 5 years a further investigation was made. The So. then had about 750 members. The ordinary rate of mort. in such a body would have yielded 60 deaths in the 5 years. The actual experience of this asso. had been 89! It was found that the ages at death in 95 cases had not exceeded 50 years, while in 46 cases the age had not exceeded 40; and that in fact the average age was only 32½ years.

The Committee in its Rep. at this period, very frankly say that they believe that the number of deaths occurring in 10 years in an inst. with a similar number of members only was almost without precedent. It shows, they naturally remark, that there is some cause connected with the occupation, not ascertained, which operated most prejudicially upon the health of those employed in it; or failing this, there was the alternative that all the unhealthy members of it had gained admission to their fund.

The Asso. had been enabled to meet its claims up to this date; and it was using its experience in the direction of safety in the future. [OCCUPATIONS; sub-heading *Printers*], vide 5th Ann. Rep. Regis. of F. Sos.

1851.—Mr. Charles Hardwick, "Past Provincial Grand Master, and member of the Board of Directors of the Independent Order of Odd Fellows, Manchester Unity," pub. a pamph.: *The Provident Inst. of the Working Classes; F. Sos.: their Hist., Progress, Prospects, and Utility; a Lecture delivered at Preston, Bolton, Chorley, London, and Manchester*. The author says in his preface:

I was induced to prepare the following lecture solely with the view of conveying to the members of F. Sos., in my own locality, such information as it appeared to me would enable them to examine, for themselves, the merits of their present financial systems; to awaken their attention to the precarious foundation upon which many of them are based; and to simplify as much as possible the first steps to so important an investigation. . . .

That the author succeeded in making the subject at once interesting and instructive we can testify. The lecture speedily passed into a 2nd ed. Some of the facts it contains have been made use of in various parts of this art.

Mr. Arthur Scratchley, M.A., pub.: *A Guide to the Formation and Management of F. Sos. for Assu., Investment, and Emigration, under the Act 13 & 14 Vict. c. 115, with Rules, Forms, and Tables*. In this work there is much information of interest. (See 1859.)

Mr. J. H. James pub.: *A Practical Application of the Joint-Stock Cos. and F. Sos. Acts to the Regis. and Gov. of Assu. Sos.: with Precedents for a D. of Sett., Rules, and Forms*. This work was the result of considerable labour.

An estimate was made this year [we do not trace the authority] that the total number of F. Sos. enrolled and unenrolled which had been formed in the three kingdoms *Eng., Scot., and Ireland*, reached 47,223; that the ann. revenue of the existing Sos. was £7,781,000; with accumulated funds reaching £17,776,000!

Mr. Neison, sen., in an Address delivered before the Gen. Meeting of the "English and Foreign Representatives of Ins. Interests," held at the rooms of the Inst. of Act. on 5 July this year, dwelt strongly on the fact of the duration of life among such classes as make up the bulk of the members of F. Sos. being beyond that of the higher classes of society, or of the "select classes dealing with assu. cos." This question will be reviewed in some detail under INDUSTRIAL INS.

There was this year founded the *Great Eastern Railway Provident So.*, Bishopsgate Station. The number of members in 1875 was 3248, with an accumulated fund of £9000.

There was estab. about this date, under the patronage of Mr. Walter and the managers of the printing department of the *Times* newspaper, a Provident Asso. apparently based upon the plan discussed by Dr. Farr under date 1853 in this art. It embodied—1. A *Savings Bank*. 2. A *Life Ins.* contribution. 3. A *Sick Fund*. 4. A *Medical Fund*. The compositors and others are called upon to deposit in the Savings Bank a certain fixed proportion of their wages. This fund is made available to defray the contributions required to be made to the other departments, but more particularly for Life Ins. The risks of this department are not undertaken by the Asso. itself. The men select their own officers. The Sick Fund is contributed to on a graduated scale by the members, and receives a subsidy from Mr. Walter. It pays 21s. p. week to its members while sick for 3 months, and afterwards a reduced sum. It also provides £10 at death

for expenses of funeral, etc. Its success has enabled this sum to be considerably increased. The Medical Fund provides medical attendance for the members and their families for ordinary illness. It appears to be a model Asso.

1852.—There was enacted the 15 & 16 Vict. c. 65—*An Act to Continue and Amend an Act passed in the 14th Year of the Reign of H. present M. to Consolidate and Amend the Laws relating to F. Sos.*—by sec. 4 of which the Act of 1850 is continued to 1 Oct. 1853, “and to end of the then next Session of Parl.” [It was afterwards continued until 1855.] It was then enacted that the Acts relating to F. Sos. passed previously to 1829 be continued in force as to the Sos. regis. under them; but all such Sos. might come under the provisions of the Act of 1850 by having their rules “certified in conformity thereto; and thereupon the provision of the Act or Acts under which such So. has been estab. shall cease as to such So., except as to any offences committed, or penalties or liabilities incurred, or bond or security given, or proceedings taken under such Acts.” (Sec. 1.)

The Registrars of F. Sos. in Eng., Scot., and Ireland to retain their salaries and expenses out of fees received (2). Trustees of F. Sos. having deposits with Commissioners of National Debt to furnish returns demanded by such Commissioners. (See 1854.)

A Select Parl. Committee was this year appointed, “to inquire into the operation of the Law relating to Friendly Sos.” This Committee consisted of Mr. T. H. Sotherton (Chairman), Mr. Adderley, Mr. Bonham Carter, Mr. George Cornwall Lewis, and other well-known members. Among the witnesses called before it were Mr. Michael Seward, Mr. James John Downes, Mr. Gilbert Laurie Findlay, Rev. John Hodgson, Mr. Benjamin Ecroyd, Mr. Richard Henry Jones, Mr. Joseph Marsh, Mr. Charles Jellicoe, Mr. Saml. Ingall, Mr. C. J. Bunyon, Mr. John Tidd Pratt, and various others. The Rep. of the Committee, which was ordered to be printed 25 June, 1852, contains (*inter alia*) the following:

Your Committee appointed to inquire into the operations of the Laws relating to F. Sos. have examined witnesses thereon, whose evidence they have agreed to report to the House.

They proceeded first to inquire into the particulars of those cases of alleged hardship or injustice which have been brought under the notice of the House during the present Session, by petitions from different parties.

1. The Act of 1850, which is the existing law regulating F. Sos., contains a proviso that it shall not be lawful for any So. estab. under this Act to assure the payment of any sum exceeding £100; nor any annu. exceeding £30 p.a.; nor a sum in sickness exceeding 20s. a week. It also prohibits *nomineeship* to others than widowers, widows, or children of members; and it reduces the *int.* payable on future deposits made with the National Debt Commissioners to £3 p.a. instead of £3 16s. 9½d.

One operation of these clauses has been to oblige certain benevolent and useful Sos. at DUBLIN, CORK, and LIMERICK, and certain other Sos. estab. nearly a century ago in the NORTH of IRELAND for providing an income for the widows of Presbyterian ministers, to suspend their transactions; because, 1st, those Sos. grant annu. to an extent exceeding the limits of this Act; 2nd, they grant them to nominees, such as sisters and brothers, nephews and nieces, cousins and strangers in blood; 3rd, they are reluctant to reduce their benefits to suit the lower rate of *int.*

Dr. Cooke and Dr. Montgomery appeared before your Committee, and their evidence shows that their So. is the main dependence of the members of their ministry, as a provision for their widows; that it has existed nearly a century, and was recognized by the Irish Parl. 36 Geo. III.; was enrolled in 1809, under 49 Geo. III.; and that they had been formally placed within the F. Sos. Act by 2 Wm. IV. c. 37. They complain besides that the Act requires T., a bond from the treasurer; that a member may not belong to 2 Sos.; that Sos. should be forced to make returns to the Registrar; and that they should not be allowed to lay out their money in land.

The Committee admit that they see no good reason why the limitation as to the amount of the annu. on sickness may not be withdrawn in the next Bill, “if only care be taken to require that the T. for such annu., where the amount of such annu. is certain, be calculated by a competent actuary, and the contributions be kept distinct.” On the other heads of complaint the Committee thought that the case of these long-estab. Sos. was *deserving of a special Act*; and that it was not advisable to alter the general law in order to accommodate their requirements, “however unobjectionable, or praiseworthy, they may be.”

2. A petition has been presented from 83 Assn. Cos. complaining that certain 5 F. Sos., estab. under 10 Geo. IV. c. 56, before the year 1840, claim to have the power to make their pol., by a clause in the pol., payable to widow or widower, or child of a member, to any amount; and that such pol. are exempt from legacy and probate duty; that these Sos. have ceased to possess the character for which Parl. granted privileges; that they have an unfair advantage, from being constituted under the F. Sos. Act, which is equivalent to a Charter, being in reality Trading Life Assn. Cos.; and they ask to have such Sos. confined in their transactions to the limits prescribed by the Act, namely, of £100, or compelled to be reconstituted in the same manner as other Life Cos.

The 5 Life Offices here referred to were: 1. *Clergy Mut.* 2. *Friends Prov.* 3. *Prov. Clerks.* 4. *National Prov.* [called in Rep. *National Benevolent*]. 5. *United Kingdom Provident.* We believe, as a matter of fact, there were several others. (See 1854.)

Your Committee examined several witnesses in support of this view, as well as other witnesses on the part of the Sos. against whom the complaint was laid; and they refer the House to the evidence, which is of an interesting and curious nature.

It is also to be borne in mind, that the security and good man. of a So. depend in no small degree upon the amount of their transactions, and of their revenue; and it is desirable therefore to induce the poorer class to insure in Sos. in which the richer also insure; and these 5 Sos. have beyond question conducted in a very material degree to extend downwards in the scale of society a knowledge of the principle of mut. assu., and a disposition to embrace the advantage of it.

The other alternative your Committee incline to recommend to the attention of Parl., namely, to allow the privilege of exemption from stamp and probate and legacy duty, to the pol. of all Life Assn. Offices, as well as F. Sos., to the amount of £500. This amount is taken, because, whatever limit may be fixed upon, that will virtually be the limit of the provisions made for their families

amongst the great mass of those parties whose interest is intended to be advanced by any legislative measure on this subject.

Your Committee refer to the very explicit evidence of the Chairman of the Board of Inland Revenue, and of Mr. Trevor, to show that in their opinion the loss to the public purse would be inconsiderable, if put in comparison with the national benefit which they believe would be secured.

If Parl. should adopt this proposal, it will of course be necessary to guard the privilege from abuse, by annexing conditions to all Sos. or Assu. Cos. which may avail themselves of it; amongst which the most prominent should be, that a minute and strict return of the pecuniary conditions and accounts of each should be made, to be laid before Parl.

It may also be found that, irrespective of any pecuniary advantage, such a plan may be a means of checking the formation of delusive and ill-founded schemes for estab. Life Assu. Cos.; and thus a subject of so important and critical a nature, that although your Committee do not feel justified by the terms of their reference to enter upon it in detail, yet they think it right to press it upon the notice of the House.

Your Committee examined Mr. Pratt, Regis. of F. Sos., about the tenure of his office. He states that he is the sole depository of all the various mass of miscellaneous matter which in the last 20 years has been poured in from above 10,000 Sos.; and he suggests that a Board should be formed for the purpose of superintending the man. of F. Sos., and of affording advice and information when applied to; of furnishing correct Rules and T. at a small expense, for which they would employ eminent actuaries, or the Inst. of Act., and of requiring Sos. which are possessed of legis. privilege to act up to the rules on which they were estab.

Sir Alex. Spearman, the Comptroller-Gen. of the National Debt Office, was examined regarding the investments of F. Sos. in the Gov. Stocks; and the substance of his evidence was as follows: His office had no means of checking or verifying the amounts transmitted by any one So., beyond the statement of the So. itself [showing very inefficient book-keeping in his department!]. *The int. allowed to the Sos. was higher than the Gov. realized*; that the risk was great if the funds should go down: for the Sos. might draw out their money, and the difference between the price when sold and when invested would be so much loss to the country; that sums were seldom drawn out when once invested with the N. D. Commissioners; and it was open to surmise that the Sos. continued to pay current claims without disturbing their investments carrying high int. [a testimony of sound financial judgment]; this was to the prejudice of the public revenue. The total funds of F. Sos. invested with the Government reached £2,393,000—part at int. at the rate of £4 11s. 3d., and the remainder at £3 16s. p.c. p.a.; whereas the average rate realized during the past 12 years had been only £3 4s. 9d. p.c.; and that the total loss if the whole were sold out and paid off at the then price of funds would be £127,000! But that in the case of the *Clergy Mut.* (one of the Sos. complained of), if the accounts with them were then closed, the revenue would have gained a profit of £5900 [fit subject for reflection of Man. of that So.]. The Committee recommended these facts to the serious consideration of the House.

The last witness agreed with Mr. Pratt in the suggestion of a *Board of Control* for F. Sos., in view of a greater number of persons having cognizance of the man. of the Regis. Department; he also thought it in the interest of F. Sos. that they should be placed under greater control than they then were; and that the existing state of things as regards the regis. merely the name and rules was unsatisfactory in a public point of view.

In the opinion of your Committee, the subject of investments and the interest payable on them, requires to be maturely considered, so as on the one side to protect the revenue, and on the other to keep faith with parties who have acted under the sanction of Acts of Parl. A power is evidently wanted to obtain more full investigation of all Sos. investing through the National Debt Office, and of requiring that such investments shall be subject to reduction, in proportion to the just demands which ought to be payable from them.

All these subjects ought to be examined and settled whenever a Bill shall be brought in for rendering permanent the law relating to F. Sos., which at present has a limited duration.

It does not appear to your Committee that these 5 Sos. have been acting contrary to the Law. The Act under which they were enrolled declares in its preamble, that it is expedient to give protection and encouragement to the formation of F. Sos., and enacts that any number of persons, without distinguishing any particular class or condition, may form themselves into such a So. To Sos. so estab. that Act gave privileges of interest at £3 16s. 0½d. p.a., exemption from stamp duties, priority of payments from executors of persons dying in their debt, and exemption from probate duty to the amount of £20. . . .

Although it appears that these Sos. possess and exercise privileges and exemptions for which they can allege specific stat., passed for the encouragement and protection of F. Sos., it appears to your Committee that, as they have manifestly outgrown the particular class of objects which were in the contemplation of Parl. when these stat. were passed, and have become in fact Life Assu. Offices, they ought to be placed upon an equal footing, in respect of such exemptions, with other Assu. Cos.: either by being deprived of those privileges, or by extending them to all alike.

There are grave considerations which should make Parl. hesitate before it proceeds to adopt the former alternative. To make a provision for a wife and family out of the savings of a salary, or wages, or small income, is an object which ought unquestionably to be fostered and encouraged. This would be checked and damped if an advantage hitherto offered should now be withheld. But it is said, Confine these exemptions to Sos. which do not issue pol. above £100 or £200. If this were done, so far as these 5 Sos. complained of are concerned, they would indeed lose the privilege which they hold under the specific authority of Acts of Parl.; but they would still continue their transactions, and would be in the anomalous position of being constituted under the F. Sos. Acts, but destitute of all the benefits conferred by such Acts!

Mr. J. Tidd Pratt gave it in evidence that there had been regis. in England and Wales, under the Act of 1850, about 1920 Sos., including the Branches and Lodges of the Odd Fellows, Foresters, etc. Out of this entire number, about 28 had their T. "certified."

Mr. Pratt thought that if a Board of Control or Advice for F. Sos. were constituted, such Board should not appoint any particular Act to certify the T., "because by that it might be considered that the Board, or in other words the Gov., would be responsible

for the accuracy of those T.; and if there was a failure, either from mismanagement or any other cause, there might be some claim by that So. upon the Gov. (1321).

The number of F. Sos. having deposit accounts with the Commissioners of the National Debt direct was only between 500 and 600 (1399); but the total having deposits with Savings Banks were between 700 and 800 (1463). It appeared from the evidence, although it was not directly so stated, that a So. so depositing might, by watching the fluctuations in the funds, and regulating its deposits and withdrawals accordingly, secure a profit by the operation. (*Vide* evidence of Sir A. Spearman.)

Mr. Charles Jellicoe intimated to the Committee that the Highland So. of Scot., finding that its T. (pub. 1824) were not to be depended upon, had withdrawn them, and given notice to that effect; and had requested the Inst. of Act. to look into the matter with a view to supply other T., "or to suggest such other means of regulating the Sos. as may be best calculated for their welfare." He made a very practical suggestion as to the law of F. Sos., viz.: "that in any future Act relating to F. Sos., instead of reference being made to previous Acts, *all the previous Acts might be repealed*, and that the new Act should recite that Sos. formed between the years so and so, should have such and such privileges—mentioning the privileges—and that other Sos., estab. in succeeding periods, should have such and such privileges—again mentioning them—so that the great obscurity occasioned by the Act of Parl. repealing Acts which repeal part of other Acts, might be in some degree avoided."

This year there was presented to Parl. and ordered to be printed: *Abstract of Returns respecting F. Sos. in E. and W. during the 5 Years ending 31 Dec. 1850*. These had been obtained, in reply to, and upon forms sent out by the Regis. of F. Sos. pursuant to the requirements of the Acts of 1829, 1840, and 1846. In the introduction to this important document, it is set forth:

The returns received have been carefully abstracted, under the direction of the Regis. of F. Sos. in Eng.

Those classed as "perfect returns" contain the information which renders them useful in making a comparison with existing data for the formation of T. of contributions and allowances in cases of sickness, etc. The "imperfect returns" are such as could not be used for such purposes in consequence of some important information being omitted; but an account of them has been inserted to show the number of members in the respective Sos., the amount of funds, etc.

The actual amount of sickness experienced by the members of any So. cannot be ascertained, but only the length of time during which sick pay has been claimed. To ascertain the true amount of sickness, a deduction should be made for cases of imposture by feigning sickness; an add. for those who do not claim sick pay, although entitled to do so; and another add. on account of some forms of sickness for which no pay is allowed. A rule (which is very common) that a member in arrear for a certain time shall be suspended from being entitled to pay, although he may be ill, is another cause preventing the actual amount of sickness from being known. It appears therefore that the ratio of sickness in F. Sos., being of such a peculiar character, can only be ascertained from returns of their own experience.

The term "sickness" has one common meaning in all F. Sos.; but "superannuation" has a widely different signification in some Sos. to what it has in others. Superannuation pay is allowed in some only on account of total incapacity from work arising from age; in others, a member, although young, may be superannuated after being on the sick list for a lengthened period; and in others superannuation pay is allowed to each member who survives a certain age. Under these circumstances no account has been taken in the "Abstract" of the superannuated members, except that they are included in the "total number of members at the end of 1850."

With respect to the Report of the "Assets" and "Liabilities," it has been found that in some Sos. a portion of the funds has been invested in various securities unauthorized by the Acts of Parl. relating to F. Sos., and contrary thereto—among which may be mentioned investments at int. in the hands of Brewing, Banking, and other mercantile firms, in Shares in Building Sos., in Turnpike Trust Securities, in the Scrip of various Public Cos., etc. As it was not deemed advisable to provide a separate col. in the Abstract for the purpose of entering "illegal investments" where they have occurred, they have been included in the first col. relating to the funds headed "Funds invested on Real or Heritable Securities, or Heritable Property, etc."; and they are included in the col. of "Total Funds."

The returns have been arranged in counties. A reference has been made to such Sos. as have had their T. certified by an actuary, whether the So. is composed of males, females, or of both, etc.

Finally, it is stated that it was almost impossible to ascertain the number of F. Sos. which were then in existence. There was no authentic account of the Sos. enrolled under the Act of 1793, and the other Acts previous to 1828. The following T. shows the numbers regis. between 1828 and 1847. [See T. on page 472.]

Here then we have evidence of 10,433 F. Sos. in E. and W. [it is a great pity that returns could not be obtained for Scotland and Ireland at the same time], of which 9497 were in England and 936 in Wales. Of the Eng. Sos. 3934 had sent in returns; of the Welsh Sos. 357. The aggregate number of members in the Eng. Sos. was 740,581; in the Welsh Sos. 41,141; total, 781,222. The contributions received from members during the year ending July, 1847, was in Eng., £662,082; in Wales, £31,669; total, £693,751. The amount disbursed to members, during the same period, was in Eng., £491,462; in Wales, £27,516; total, £518,978.

But it is further pointed out that there were a very large number of F. Sos. having a great number of members, and a considerable income, that were not enrolled, and concerning which therefore no detailed information could be obtained. Then, again, from 8 July, 1847, to 23 Nov. 1852, the number of F. Sos. whose rules had been enrolled was about 5520—this brought up the total number of enrolled F. Sos. to about 16,000. There had, however, prob. been some duplicate enrolments. The returns had been brought up to 31 Dec. 1850.

FRIENDLY SOCIETIES, 1852.

Friendly Societies in England and Wales, Enrolled between 1828 and 1847.

Counties.	No. of Societies.	No. of Returns received.	No. of Members on 8 July, 1847.	Amount of Money received from Members during year ending 8 July, 1847.	Amount of Money paid to or on account of Members during the same period.
<i>England.</i>					
Bedfordshire	155	71	5,578	4,492	3,964
Berkshire	118	57	4,635	3,703	2,548
Buckinghamshire	138	65	6,076	5,202	3,770
Cambridgeshire	125	55	3,461	4,305	3,220
Cheshire	254	118	17,800	13,719	12,305
Cornwall	167	95	12,395	9,443	8,328
Cumberland	30	16	2,120	1,506	1,308
Derbyshire	128	59	5,734	4,317	4,095
Devonshire	362	193	29,768	34,457	29,521
Dorsetshire	126	63	6,810	5,348	4,192
Durham	217	58	6,627	5,523	4,870
Essex	274	98	16,459	18,229	15,172
Gloucestershire	236	103	11,210	14,227	10,732
Hampshire	301	149	24,760	20,921	19,302
Herefordshire	45	18	821	686	992
Hertfordshire	94	46	5,289	6,054	4,917
Huntingdonshire	65	41	2,429	2,175	1,904
Kent	313	190	29,810	27,857	24,304
Lancashire	620	293	258,095	71,200	66,869
Leicestershire	137	75	5,606	4,552	4,563
Lincolnshire	111	67	5,814	5,620	5,386
London }	268	65	22,297	132,745	54,076
Middlesex }	1301	317	43,380	62,421	44,632
Monmouthshire	356	106	10,341	11,699	10,797
Norfolk	262	121	7,644	6,793	7,358
Northamptonshire	218	118	8,209	6,914	5,694
Northumberland	213	56	6,666	6,835	6,371
Nottinghamshire	59	34	2,734	4,359	3,371
Oxfordshire	111	55	3,468	3,335	1,965
Rutlandshire	11	7	624	476	388
Shropshire	198	90	12,639	8,167	7,321
Somersetshire	218	96	10,400	7,535	5,802
Staffordshire	445	201	27,639	25,291	20,578
Suffolk	265	110	9,994	27,313	20,929
Surrey	324	114	15,475	16,175	14,975
Sussex	90	49	5,891	4,886	3,664
Warwickshire	336	130	16,381	12,054	8,513
Westmorland	3	3	232	195	226
Wiltshire	135	53	7,358	3,704	2,500
Worcestershire	214	86	5,437	5,175	3,963
Yorkshire	454	193	63,315	52,374	37,077
Total	9497	3934	740,581	662,082	491,462
<i>Wales.</i>					
Anglesea	34	14	1,808	1,217	899
Breconshire	147	48	4,907	5,079	3,838
Cardiganshire	76	26	2,565	1,414	1,029
Carmarthenshire	76	28	2,031	1,485	1,275
Carnarvonshire	46	23	3,595	2,479	2,033
Denbighshire	91	51	8,245	6,442	6,497
Flintshire	33	23	3,382	2,255	2,045
Glamorganshire	248	95	9,097	7,141	6,231
Merionethshire	48	19	2,165	1,216	931
Montgomeryshire	57	—	—	—	—
Pembrokeshire	69	26	2,891	2,618	2,393
Radnorshire	11	4	455	323	345
Total	936	357	41,141	31,669	27,516
Total of Eng. & Wales	10,433	4291	781,722	693,751	518,978

Mr. J. Tidd Pratt said before the Select Parl. Committee of this year, in respect to these returns :

674. . . . From the returns I have now in my possession, from nearly 3000 Sos., containing the date of the estab. of each, the ages between which each member is admitted, his trade and occupation ; much valuable information may be obtained. These returns have been arranged according to the different counties in E. and W. ; and an abstract of them is now preparing under my direction : and the number of days of sickness in each year during the last 5 years, and the number of deaths, is preparing to be laid before the House of Commons ; and I would suggest that the whole of these returns should be laid before the Inst. of Act., who I have no doubt will be able to direct the formation of such a set of T. as would have the effect of satisfying the minds of parties forming these Sos., with reference to the great difference there is now existing between the T. of different actuaries.

He afterwards (Q. 1254) stated that these returns related to about 300,000 individuals—referring to the correct returns.

A correspondence took place between the Registrar of F. Sos. and the Inst. of Act. regarding these returns. The Reg. in July of this year announced his possession of the data, and asked the Inst. "whether there was a necessity at that time for further data on the subject of sickness and mort., especially with reference to the members of F. Sos. ; and if so, whether the 40 vols. of information [of which one was sent as a sample] could be used beneficially for such an object as providing more data or not," with a view to such opinion being laid before the Lords of the Treasury. It was inquired whether the Council would consent to superintend the preparation of such data, and the subsequent compilation of T. The gen. opinion of the Council on the subject was also requested. The reply was in substance as follows :

The Council, admitting that some very valuable information had already been collected on the subject, thought that the favourable opportunity now presented of classifying the large body of more recent facts returned to the Gov. order should not be lost ; and taking it for granted that there existed, as represented, perfect returns of sickness and mort., experienced among 300,000 members for the last 5 years, the Council of the Inst. would undertake the public trust of analyzing these returns, and of forming from them a set of T. of money values for rates of allowance in sickness, and for payment of given sums at death. If however it should hereafter appear that the use of the T. ought to be modified by the nature of the individual So., its particular locality, and special regulations, the Council would propose to append to the T. such obs. as would guard the public against their indiscriminate or injudicious application.

This correspondence was submitted to the Lords of the Treasury, who appeared to think that, "in a matter of this kind, it would upon the whole be better that the work should be undertaken by that department of the Gov. which is more immediately in connexion with F. Sos., and on the establishment of which department there is employed an officer specially conversant with such matters." The data was accordingly handed over to Mr. A. G. Finlaison for treatment ; and his Reports thereon will be spoken of under date 1853 and 1854.

Mr. H. Tompkins read before the Inst. of Act. this year a paper : *Remarks upon the Present State of Information Relating to the Laws of Sickness and Mort., as Exemplified in the T. of Contributions, etc., used by F. Sos. ; and the same is pub. in Assu. Mag. vol. iii. p. 7.* The author says : "One of the most important problems of social statistics, after the questions of food and labour, is to determine the ratio of sickness ;" and he then passes under review the various attempts which had been made in this direction.

The author expressed his belief that the "rate of mortality and the rate of sickness, generally speaking, are fixed rates," which drew from the Editors of the *Assu. Mag.* the following obs. :

There is reason to believe that these rates differ in every association, not widely perhaps, but characteristically. Independently of the locality of a So. and occupation of the individuals forming one, the mode of admitting members, and the grounds of exclusion ; the quantum of medical investigation ; the rules by which persons are admitted on the sick list or taken from it ; the position and character of the members who have the management ; and many other similar influences make themselves felt, and give a particular character to each. Even the average rates of sickness and mort. throughout the country cannot be considered as ever "fixed." No doubt they may remain invariable for years ; but time may still produce changes, as we have reason to believe it has done already. Such being the case, there is of course great room for difference of opinion as to the rates which should be selected in any particular instance ; and it is quite possible that good reasons might be found for the discrepancies which Mr. Tompkins points out, and that dissimilarities exist, either in the circumstances or in the constitution of these Sos., which would naturally escape the observation of all but an experienced actuary. It is, however, undoubtedly true, that great inconvenience is felt from the want of sufficient data, especially as regards sickness—what has been collected on that head being, as Mr. Tompkins justly states, notoriously imperfect and insufficient ; and therefore it is undeniable that the making the valuable data collected with so much labour by Mr. Tidd Pratt accessible would be a great boon to the whole community.

As regards the general question, it is time that some steps were taken to place the F. Sos. of this country on a better footing ; for notwithstanding the laudable efforts made by the Government for years past, and the strenuous exertions of Mr. Sotherton, Mr. Bonham Carter, and other members of the Legislature, to bring about such changes in the law as might be calculated to improve their condition, nothing can, on the whole, be more unsatisfactory. *For our own part we are disposed to think that it would be wiser to discourage them, and to strive to induce the classes more immediately concerned with them to follow the example of their perhaps more intelligent fellows in the next and superior grades of life, who prefer to resort for similar objects to independent asso., established for the purpose of meeting their wants in this respect.* It is much to be feared that the good effected by F. Sos. bears no proportion to the loss and disappointment which their failure so frequently entails ; and it is to be doubted whether there can ever be that constancy and stability in the management of them which is essential to carry out and bring to completion contracts, which from their nature must be of many years duration. If asso. of this kind be indispensable to the classes from which F. Sos. are constituted, it would be well to base them on the most simple principles, leaving more

serious engagements to be dealt with by more stable bodies. An ann. sub. to be expended in the sickness of the year, or to be divided amongst the survivors at the end of it, might be to certain extent beneficial, and might serve for the cultivation of a friendly understanding with promotion of mutual good offices; whilst any loss of moment, or disappointment of success would be out of the question.

The was pub. this year: 1. *Suggestions to the Promoters and Members of F. Soc.* It was an official pub. 2. By the Rev. W. Lea: *A Catechism on Clubs—what is it, which to avoid.* 2nd ed. 3. Mr. Charles Hardwick pub. a pamphlet: *F. Soc.; their Progress, Prospects, and Utility.*

There was also pub. by Mr. Alex. Robertson: *Periodical Savings Applied to Periodic Purposes: with Remarks on the Construction and Practice of Friendly, Old-Fashioned, Building, Freehold Land, Loan Soc., and Savings Banks, and suggesting a Plan of a Protecting Life Assn.,* wherein he very tersely remarks: "F. Soc., variously regulated and instituted for different benevolent objects, are of very ancient date, and are to be seen appended to almost all asso. originated for personal protection, the management of general interests, or for religious or social purposes. The Incorp. Cos. and Trades, Man Lodges, and some of the Religious Orders, had their Friendly Soc. or *Alms*, as they were sometimes called." (p. 10.)

Same year the Rev. J. B. Owen pub. his lecture on *Popular Institutions*, which deals with F. Soc.

The *County Union Life*, etc., founded this year, proposed as one of the broadest its bus., "the securing Benefit Soc. against ultimate failure"—meaning F. Soc. The prosp. said:

In consequence of the want of adequate scientific arrangements at the time of their estab., most Soc. have been very generally founded on an insecure basis; to this in many cases has been added great amount of mismanagement; and as the consequence, great numbers of them are approaching to a crisis which will be ruinous to the members who are relying on them for support. The *County Union* is open to applications from all Soc. of this description for the purpose of indicating the means by which their affairs may be relieved from embarrassment, and affording them the assistance requisite to meet the claims of their members, subject to such modifications as the present state of their affairs may render necessary.

The remedy in this case would prob. have been much worse than the disease.

Belgium.—There was this year pub. in Brussels: *Institutions de Bienfaisance de la Belgique*, from which, and from other sources, we propose to draw some information regarding the position of F. Soc. in Belgium at this date.

"Mutual Aid Soc." are especially instituted to assist sick working men. One kind confines itself to giving relief in money; another kind, smaller in number, adds to this medical assistance and medicine. Some also pay the funeral expenses, and give pecuniary relief to the family in case of death. The orig. of many of these Soc. is very ancient; others have only existed a few years. Some are instituted by the working classes themselves; others by their employers. Their organization is of infinite variety.

In a Rep. of 21 Jan. 1851, made by Mons. T. Kint de Naeyer on the proposed law of Mut. Aid Soc. in the session of the Chamber of Representatives is a detailed list of the Soc. of this class then existing in Belgium. This list contained the name of each Soc., its date of foundation, place of meeting, occupation of the members, number of part. members, rates of contribution, nature of benefit afforded, amount of funds, etc. From it there appeared to be a total of 211 Soc., located in 35 towns and districts, and having 24,367 members. Several important localities, and two entire provinces, viz. Limbourg and Luxembourg, had no inst. of this kind.

The Soc. were at this date regulated by a law dated 3rd April, 1851. This law authorized the Gov. to recognize Mut. Aid Soc., of which the object was to assure temporary succour, either to the members in case of sickness, wounds or infirmities, or to the widows or families of deceased members; to provide for funeral expenses; to facilitate the accumulation of the members' savings for the purchase of necessaries, provisions, or for other temporary necessities.

The recognized Soc. for Mut. Aid enjoy the following advantages:

1. The power to sue and be sued; but when the affair exceeds the jurisdiction of the Judge de Paix (Justice of the Peace), they cannot plead without the authority of the permanent deputation of the Provincial Council, except they have recourse to the King, in case the authorization is refused. They can obtain exemption from the costs of procedure on conforming to the *arrête royal* (art. 6).

2. Exemption from stamp duties and registration fees of all deeds made in the name of the Soc. or in their favour. All certificates, notices of authorization or revocation, and others, which are required to be produced by the members, shall be delivered gratis, and exempt from such fees and duties.

3. Power to receive donations or legacies of personal property by attending to the formalities prescribed by No. 3 of art. 76 of the Communal Law.

It was hoped that by means of this law the organization of the F. Soc. of Belgium might be placed upon a more solid, uniform, and extended foundation. It was also intended to encourage co-operative asso.

It appears that there exist in Belgium a number of *Provident Funds*, or superior F. Soc., instituted in favour of sick, wounded, infirm, and disabled workmen, their wives

and children. These embrace in their operations a variety of modes of assistance, which essentially distinguish them from the Mutual Aid Sos. These are usually promoted among persons engaged in special occupations or industries, or whose labour exposes them to especial dangers. Of these there are several kinds, of which we shall speak in their order.

1. *Provident Sos. for Miners.*—There were 6 of these Sos. in existence; the first dating back to 1839; 3 were formed in 1840; and 2 in 1841. These provide pensions for life, and also temporary pensions. The *pensions for life* are allotted, 1st, to workmen rendered incapable of work by reason of wounds received, or by accidents happening, while they were at work, either within or without the mine; 2nd, to widows of workmen who had perished by accident in a mine; 3rd, to the father and mother, grandfather or grandmother, of workmen who had perished by accident in a mine, when, not being able to provide for themselves, they had no support but the deceased. The *temporary pensions* are accorded, 1st, to the infant children of a widow whose husband has perished by accident while working in a mine; 2nd, to the orphan without father or mother, whose father or mother, the last survivor, has perished by accident in a mine, when they are in need and the deceased was their principal support. The pensions referred to in these cases cease as soon as the children attain the age of 12 years, except in case of sickness, or infirmity duly proved by the certificate of the doctor.

The funds are made up from the following sources—1. Deduction from the wages of the miner. 2. The aid given by the proprietors of the mines. 3. The allowances granted by the Province and the Gov. 4. Int. on capital and extraordinary receipts. 5. Gifts, legacies, etc.

The deduction made from the miners' wages for the fund at *Hainault*, fixed orig. at $\frac{1}{4}$ p.c., had been raised to $\frac{3}{4}$ p.c.; and that for *Namur* to 1 p.c. The aid given by the proprietors of the mines is equal to the deduction made on the miners' wages. In the fund of *Hainault* and *Luxembourg* there existed a reserved fund, produced by a deduction of 10 p.c. on their receipts, in order to provide for expenses which might be occasioned by extraordinary accidents. A part of this fund might be applied to ameliorate the moral condition of the workmen, and to propagate instruction among their children. Lastly, the rules prescribe the formation, in each mine of the Asso., of a fund of their own, destined to relieve the wants of the sick or wounded miner.

The organization of these funds is made to correspond with the object of their creation, as far as may be. The assistance is voluntary on the part of the proprietors; the participation of the miner is assured in each mine by the rules of the estab. *The Gov. overlooks the whole, and encourages adhesions to the Asso. by the grant of subsidies proportioned to the importance and wants of each fund.*

The sum total of the receipts of the district funds, and of the separate funds, amounted in 1850 to £29,223. The sum total expended was £26,666, in which was included a sum of £442, appropriated to the instruction of the children of miners. On 1st Jan. 1851, they possessed reserves amounting to £41,583. The fixed liabilities by way of pensions, etc., were £8358.

The number of workmen employed in the mines and the wages received is shown as follows:

1847	workmen employed	48,000	wages received	£1,050,216
1848	"	43,400	"	791,684
1849	"	45,100	"	740,857
1850	"	47,319	"	864,904

These were employed in 305 mines.

In 1847 the contributions from the miners was 65 p.c. of the whole fund; from the proprietors 25; from Gov. and other resources 10 p.c. In 1850 the respective proportions were 59, 27, and 14 p.c. The average payments by each workman were, in 1847, 9s.; in 1850, 7s. 8d.; by the proprietors in the same years 3s. 2d. and 3s. 4d.

The principal promoter of these Mining Funds was M. Visschers, member of the Council of Mines, whose writings upon *Provident Asso.* are widely known. And notwithstanding some admitted imperfections, the system has been of great value to the classes for whose benefit they were introduced.

The general resemblance of the *Northumberland and Durham Miners Asso.*, 1862, to these Asso., will not escape notice.

2. *Provident Sos. for Workmen employed on the State Railways.*—By Royal Ordinance of 1st Sept. 1838, a fund was estab. in favour of the workmen employed on the State Railways. This fund afforded temporary succour to workmen rendered for a time incapable of working, as well as to their widows and children not capable of providing for themselves; but it did not admit the principle of a pension, or permanent succour, tending to ameliorate the condition of workmen who, by reason of infirmity, sickness or wounds, became thenceforth continuously incapable of working.

The revenues of the fund were orig. built up by a deduction of 1 p.c. on the wages of all the workmen employed on these railways. Under the regulations of 1 July, 1845, supplemented by those of 14 Aug. and 11 Sept. 1846, the deduction is 2 p.c.; and a reserved fund has been raised to provide against unforeseen and extraordinary demands. The fund is administered gratuitously by a Committee of 10 members, chosen from among the officers and workmen of railways.

The assistance given to the sick varies from one-half to three-fourths of their wages. But in case of incapacity arising from injuries resulting directly in the service, it is sometimes equal to the whole wages; but these are only in extraordinary circumstances. In 1848 the Committee adopted the following graduated plan:

1st Class.—Light sickness or wounds:

50	p.c. of wages to unmarried workmen; or married without children.
55	" " workmen married, with 1 child.
60	" " " " 2 children.
65	" " " " 3 "
70	" " " " 4 "
75	" " " " 5 and more.

2nd Class.—Serious wounds or sickness treated at the hospital.

The preceding allowances are augmented 10 p.c.; but children over 13 do not count. The father or mother of workmen, incapable of work, whether by age or infirmity, count as a child. Children over 13 are counted if by reason of infirmity they are a permanent charge on the parents.

When the wounds or sickness are of a grave character, the patients are, as often as possible, placed at the expense of the Fund in the civil hospitals of their locality. Their treatment is also confided to doctors, under special arrangement with the Committee. Again, chests, with all proper appliances, are placed at central depôts on the railways.

Independent of the temporary assistance afforded in case of sickness or wounds, the Fund allows pensions of 6*s.* 8*d.*, 10*s.*, and 12*s.* p. month to the widows and orphans of deceased workmen, who have contributed more than 5 years to the Fund. It also allows an ann. pension of which the average is 15*s.* per month to workmen who have paid from 5 to 8 years to the fund, and are removed from the service on account of old age or infirmities.

The account of the operations of the Fund pub. in 1849 furnishes some very interesting statistical details. The number of individuals contributing to the Fund was 4313—of whom 3071 were married men; 1114 were bachelors; 117 were widowers, and 12 were women. Their families were composed of 3071 women and 12,524 children—grand total, 16,838. The periods of their service were classed. The average wages of those employed was nearly 1*s.* 8*d.* p. day's work.

During the period from July 1845 to 31 Dec. 1848, there were 2438 cases of sickness, causing 142 deaths; the number of days of incapacity to work was 53,070, during which the workmen received on an average assistance equal to nearly 1*s.* 8*d.* p. day—this sum including the medical expenses. During the same period the number of wounded was 789, out of which 19 died. The wounds occasioned 17,561 days of incapacity to work, and the average assistance allowed to the wounded workman was 1*s.* 10*d.* p. day,—this sum including the medical and surgical expenses; 778 of these accidents happened during worktime, viz. 132 on Mondays, 115 on Tuesdays, 114 on Wednesdays, 112 on Thursdays, 116 on Fridays, and 109 on Saturdays, and 80 on Sundays. Mondays, therefore, were the unlucky days. This has been observed in other employments. Friday is the next—and the character of "unlucky Fridays" does not apply.

Finally, the assistance afforded during 3½ years amounted in the whole to the sum of £7396, divided among 2435 sick workmen, 783 wounded ditto, 169 widows of workmen dying from disease or sickness, 14 widows of workmen dying from wounds, 10 orphans, and 91 workmen pensioned on account of incapacity to work, arising from infirmity or old age.

The resemblance of this Fund in its objects to several of the *Railway F. Sos.* in this country will not escape obs.

3. *Provident Funds for Fishermen and Pilots.*—The Pilots' Provident Fund, estab. and organized by virtue of the Royal Warrants of 30 June, 1839, and 10 Dec. 1844 is sustained by a deduction of 2 p.c. on the pilot dues paid by the ships which have a pilot on board. The daily business of the Fund is confined to a cashier, under the direction of the Director-Gen. of Marine. There appear to be separate funds for the pilots and fishermen of the several ports of Ostend, Blankenberghe, Heyst, and Adinkerke. The transactions only extend to a few hundreds of pounds each year.

4. *Provident Fund for Sailors under the Belgian Flag.*—This Fund was estab. at *Antwerp* by Royal Warrant 19 Sept. 1845, and has for its objects—1. To provide assistance either temporary or permanent to sailors navigating under the Belgian Flag, and who are rendered for a time, or continuously, incapable of exercising their calling; and also to those who are without resources, after shipwreck, or by reason of unforeseen events. 2. In case of the decease of the sailors, to grant assistance to the widows and families. All captains, second captains, lieutenants, sub-officers, sailors, stokers, apprentices, and midshipmen, with the exception of sailors engaged in any other fishing than the whale fishery, sailing under the Belgian Flag, and regis. on the books of a Belgian ship, participate in the advantages of this Fund. And the same is also for the benefit of their widows and orphans.

The funds and revenue are raised—1. By a deduction of 3 p.c. from the wages of the captains, second captains, and first-class artificers, when they are above £28 p.a. 2. By

Valuing by a method explained in his Rep., he produced the following :

Valuation Bal. Sheet of the Burial Branch of the Royal Liver F. So. as at 31 Dec. 1873.

LIABILITIES—	£	s.	d.	ASSETS—	£	s.	d.
Present value of the sums ins. "and the rises" was at the above date	1,050,239	2	0	Present value of the members' contributions "or prems. payable"	1,228,460	14	0
Reserved for expenses of man. being 40 p.c. of the value of the members' contributions ...	491,384	5	7	Amount at credit of the Burial Branch	318,530	12	4
Surplus	10,543	12	9	Add int. outstanding and int. accrued but not yet due	5,175	14	0
	£1,552,167	0	4		£1,552,167	0	4

"The valuation therefore (says Mr. Sprague) shows a small surplus or bal. of assets over liabilities, which would have been increased if I had added to the amount of the Burial Fund the amount of arrears or prems. due by members at the end of the year. I have thought it better, however, to omit this amount, £8816 os. 9d., as it is certain that the whole of it would not be received by the So." He adds :

The existence of the above surplus, after deducting from the value of the prems. the full 40 p.c. allowed for expenses, is an extremely satisfactory result; and I feel no hesitation in saying that I believe the So. is not only in a position to meet promptly all its engagements, as they mature, but that unless its progress in future should be very different from what it has been in the past, its operations will result in a gradually increasing surplus. At the present time it is evident that the surplus is not sufficiently large to justify any dealing with it; and I recommend that it be left to accumulate until it shall reach a magnitude that will enable you to take into consideration the possibility of granting some increase of benefit, to those members who shall for the longest time have belonged to the So. and shall not have received any benefit from the source next to be mentioned.

The point here referred to—and it is also referred to in the Valuation Bal. Sheet—is that of "Rises." Under No. 30 of the So.'s Rules, these attach to certain ins. effected in the year 1871, and previously. Under this scheme every ins. of £6 is increased by a rise of 10s. each year after the first, until it amounts to £10. On the 31 Dec. 1873 the total amount of such rises stood at £791,016 15s., and they were increasing at the rate of about £73,000 p.a.; "but after the year 1880, when all the ins. issued under the old scale of prem. shall have been 10 years in force, there will be no further rises. And after that date I anticipate that the surplus will rapidly increase."

The data upon which this valuation is based was drawn from the books of the So. under the superintendence of Messrs. Liversage and James Atherton. It was nearly 5 months in preparation, the average number of clerks employed on the work being 44; the total cost £1920 17s. 7d.

Mr. Sprague explains the principles upon which his valuation was based as follows : and the information will be of service to other Soss. :

The above-mentioned materials having been furnished to me, it required very little consideration to satisfy me that no annu. and assu. T. could be so suitable for determining the value of the members' benefits and contributions as those T. from which I deduced the scale of prems. now in use by you. The circumstances of your So. differ widely from those of an ordinary life ins. co. On the one hand, the rate of mort. prevailing among your members is higher than that which prevails among insured lives generally, or even among the general pop. : so that any of the ordin. Mort. T. would give an altogether incorrect view of the prob. value of your engagements. On the other hand, while it is not the practice of your So., or of any similar one, to make any allowance, by way of surrender value or return of prems., to members who voluntarily withdraw from the So. or forfeit their benefits by non-payment of the prem., it is well known that there will always be many members who, from one cause or another, will from time to time leave the So. : and it does not seem right to leave this point out of consideration in dealing with your finances. I therefore in calculating the prems. at present charged by the So. used a Mort. T. deduced from an examination of the mort. among one section of your members, combined with int. at the rate of 4 p.c., and at the same rate made allowance on account of the continuous withdrawals among the members.

The importance of considering the effect of these withdrawals upon your finances is well shown by certain figures that have been furnished me with regard to the "reduced claims" payable during the 3 years 1871, 2, 3. Formerly when a member was more than 6 weeks in arrear in his payments, he was wholly "out of benefit" : and in case of death his representatives received only such a voluntary grant as the committee of man. thought fit to pay; but under the Rules, as altered in the year 1870, a member who is more than 6 weeks in arrear is not wholly out of benefit until a further time has elapsed, the length of which depends upon the standing of his ins. : and if he should die in the mean time, a certain proportion of his assu. is payable. . . .

It appears from these figures that in the 3 years under consideration, there was a difference of £14,049 between the full claims that would have been paid, if all the members who died had been in full benefit, and the actual amount paid, being rather more than 5 p.c. upon the full amount of the assu. becoming claims. This is in add. to any profit that may have been made by the withdrawal of other members from the So., in consequence of non-payment of their contributions.

Mr. Sprague adds : "Such then were the principles upon which I calculated your new prems. in the year 1870; and the subsequent investigations I have from time to time made of your affairs, have entirely confirmed my opinion of the safety of those principles. I have therefore no hesitation in applying them to estimate the financial position of the Burial Branch of your So., and looking at the results of this, and of previous investigations, I feel myself justified in certifying that your So. is in a thoroughly sound and satisfactory condition."

We quote this opinion so fully mainly on account of the disparaging remarks which we have too often seen regarding this So.—written, as is clear, by those who had no exact knowledge on the subject, and whose opinions, therefore, were entitled to no weight; but among the ignorant, unfortunately, unfounded aspersions sometimes carry greater

It is undoubtedly possible to make the relief in destitution and distress under the poor law bear some proportion to the ratepayer's previous contributions, and thus put the whole population of the country on the footing of a great F. So., in which the higher and middle classes and the better class of artisans and work-people are hon. members: but in the hour they fall from affluence are entitled—without any humiliation—as benefiting members, to pay on a scale in some degree commensurate with their previous contributions.

How can this best be accomplished? By the savings banks, and the existing F. Sos.? The services of the savings banks can scarcely be over-rated, and when the banks are more completely under public control, these services will be greatly enhanced. The F. Sos. have been left to the management of the artisans and labourers of the country, and the Gov. has interfered neither very largely nor very advantageously. It has been estab. by the valuable labours of Committees of both Houses of Parl., as well as by private inquiries, and by the failure of great numbers of clubs from one end of the kingdom to the other, that many of these Sos. are imperfectly organized; and that in their present state they are little more than "a delusion and a snare" to the working classes. The industrious man contributes in youth and in the prime of life to a So. which fails when age and infirmity overtake him.

All the successful bus. of the country is carried on by the co-operation of masters and men; and the first evident objection to the Benefit Club is that, in general, it implies the dissociation of these two classes, *in a bus. as difficult as any of the trades of the country*—in a bus. which is carried on by elaborate T., calculated by actuaries, involving the prob. of life, funds accumulating at compound int., and the secure investment of money during the whole life of a generation of men. One of these clubs undertakes what no large ins. so. is willing to undertake, and, without an actuary, plays with the certified edged tools of actuaries. . . . Clerks, artisans, and all the labouring classes obtain salaries and wages—incomes—much earlier in life than the professional classes, and it is a fortunate circumstance, of which they are apparently unaware, that by setting aside every year a small sum for 8 or 10 years after the earnings commence, they can *insure their lives*, purchase a *pension in old age*, and insure a *provision in sickness*, before they are married, and thus leave the *whole of their income after marriage free to meet the increased expenses of housekeeping*. Masters should point out this to the men and servants; they should assist as well as encourage their efforts at prudence.

It is for many reasons desirable that in Health Ins. the masters and men should be associated, and that the pay of the men in sickness should be under the same regulation as the pay in health, or be a part of the bus. of the concern. The importance of sanitary arrangements, of ventilation, cleanliness, and temperance, by which men are kept in health and vigour, is thus brought constantly under the notice of employers, as well as of the workpeople themselves, *by the financial state of the fund*, to which the masters and men contribute in regulated proportions.

But it is evident that to make the Health Ins. fund manageable, it must be of a very simple construction, and involve no contract between the fund and the contributors of much larger duration than that between the man and the master, or that cannot at any time be equitably closed. . . .

Dr. Farr's ingenious T. for accomplishing these results will be given under F. Sos., MORT. AND SICKNESS EXPERIENCE OF, at this date, and will be found worthy of the most careful consideration. He continues:

The advantage which this simple scheme offers is, that the whole finance of the fund is a matter of common account, and that the outgo and the income can be balanced every year. There is no distant outstanding claim on behalf of aged members, as the members are all under the age of 65, and pay every week a prem. to the chance of sickness during the week. *If the sickness be found to exceed the average, and cannot be reduced, as will be found to be the case in some unhealthy trilles and towns, the prem. must be raised in such proportions as the mort. of the place and the experience of the fund justify.* To cover any temporary loss of the fund the prem. may be doubled for a week or two.

The details of the arrangements and the rules for carrying the plan into operation must necessarily differ according to circumstances. To large concerns, where many men are employed and the bus. is permanent, it is particularly well adapted, and can be managed by a clerk under the manager or partner who engages and pays the men. It is also applicable to small firms and masters who may choose to associate for this purpose.

After the age of 65 the line of demarcation between health and infirmity or sickness becomes indistinct, and for the practical purposes of health ins. can be drawn with neither certainty nor uniformity. What under one set of circumstances is considered health is under another paid for as *sick time*. The provision for the age of infirmity and inroduction should therefore be of the nature of a *deferred annu.*: the prem. *commencing early and ceasing about the age of 25 or 35*; the annu. opening at 65 on the plan hereafter sketched.

A few liberal, generous, and well-estab. firms will grant pensions to their old servants: *but unless they are perpetual corporations the provision which they can offer for the declining years of life wants that element which constitutes its chief value—certainty.* Neither can they keep the necessary complicated accounts which are involved in the grant of annu. or pol. on lives. That great corp.—the Government—alone, with the advantages of publicity, can receive small deposits of money in the early life of a generation, invest it at compound int., and pay the accumulated amount at short intervals to the survivors as they descend the vale of years. *The Gov., better than short-lived private individuals or speculating cos., can keep small savings at call; and at the same time allow interest in savings banks, better, cheaper, and under surer guarantees of security than individuals or cos.; it can also insure the lives of the working classes, and encourage them to make at a small sacrifice for their families such a provision as will lighten the sorrows and sufferings of thousands of fatherless children and widows.*

The pension for meritorious and long service, as well as the life ins., should therefore be granted *under arrangements quite separate from those of the fund for health ins.* But the connexion between the master and the men should be still kept up in this branch of the transaction. The Gov. would help the master to grant his men pensions in their old age, and small pol. of ins. on their lives. The master may, as in the case of prems. for health ins., stop the prems. for life ins., and for pensions in age, out of the weekly wages, and pay the proceeds quarterly to the Gov. receiver. . . . The masters would undoubtedly on reflection, if they were able, contribute proportionally to the pension and ins. fund, and thus estab. an indissoluble and friendly bond of union between them and the companionships of men in their service.

Dr. Farr saw that there would be two classes of objections to his plan. The first, why contract this intimate connexion between masters and their workpeople? The second, let the workpeople spend their wages, earned at the market rate in the labour market for the time being, as they will. Do we not pay the poor-rate? When they are sick, or old, we have done with them! "The answer to this is, that in conforming to the dictates of his heart, and taking an interest in their permanent happiness, the master is actually only

for expenses of funeral, etc. Its success has enabled this sum to be considerably increased. The Medical Fund provides medical attendance for the members and their families for ordinary illness. It appears to be a model Asso.

1852.—There was enacted the 15 & 16 Vict. c. 65—*An Act to Continue and Amend an Act passed in the 14th Year of the Reign of H. present M. to Consolidate and Amend the Laws relating to F. Sos.*—by sec. 4 of which the Act of 1850 is continued to 1 Oct. 1853, “and to end of the then next Session of Parl.” [It was afterwards continued until 1855.] It was then enacted that the Acts relating to F. Sos. passed previously to 1829 be continued in force as to the Sos. regis. under them; but all such Sos. might come under the provisions of the Act of 1850 by having their rules “certified in conformity thereto; and thereupon the provision of the Act or Acts under which such So. has been estab. shall cease as to such So., except as to any offences committed, or penalties or liabilities incurred, or bond or security given, or proceedings taken under such Acts.” (Sec. 1.)

The Registrars of F. Sos. in Eng., Scot., and Ireland to retain their salaries and expenses out of fees received (2). Trustees of F. Sos. having deposits with Commissioners of National Debt to furnish returns demanded by such Commissioners. (See 1854.)

A Select Parl. Committee was this year appointed, “to inquire into the operation of the Law relating to Friendly Sos.” This Committee consisted of Mr. T. H. Sotherton (Chairman), Mr. Adderley, Mr. Bonham Carter, Mr. George Cornwall Lewis, and other well-known members. Among the witnesses called before it were Mr. Michael Saward, Mr. James John Downes, Mr. Gilbert Laurie Findlay, Rev. John Hodgson, Mr. Benjamin Ecroyd, Mr. Richard Henry Jones, Mr. Joseph Marsh, Mr. Charles Jellicoe, Mr. Saml. Ingall, Mr. C. J. Bunyon, Mr. John Tidd Pratt, and various others. The Rep. of the Committee, which was ordered to be printed 25 June, 1852, contains (*inter alia*) the following:

Your Committee appointed to inquire into the operations of the Laws relating to F. Sos. have examined witnesses thereon, whose evidence they have agreed to report to the House.

They proceeded first to inquire into the particulars of those cases of alleged hardship or injustice which have been brought under the notice of the House during the present Session, by petitions from different parties.

1. The Act of 1850, which is the existing law regulating F. Sos., contains a proviso that it shall not be lawful for any So. estab. under this Act to assure the payment of any sum exceeding £100; nor any annu. exceeding £30 p.a.; nor a sum in sickness exceeding 20s. a week. It also prohibits *nomineeship* to others than widowers, widows, or children of members; and it reduces the *int.* payable on future deposits made with the National Debt Commissioners to £3 p.a. instead of £3 10s. 0d.

One operation of these clauses has been to oblige certain benevolent and useful Sos. at DUBLIN, CORK, and LIMERICK, and certain other Sos. estab. nearly a century ago in the NORTH OF IRELAND for providing an income for the widows of Presbyterian ministers, to suspend their transactions; because, 1st, those Sos. grant annu. to an extent exceeding the limits of this Act; and, 2nd, they grant them to nominees, such as sisters and brothers, nephews and nieces, cousins and strangers in blood; 3rd, they are reluctant to reduce their benefits to suit the lower rate of *int.*

Dr. Cooke and Dr. Montgomery appeared before your Committee, and their evidence shows that their So. is the main dependence of the members of their ministry, as a provision for their widows; that it has existed nearly a century, and was recognized by the Irish Parl. 36 Geo. III.; was enrolled in 1809, under 49 Geo. III.; and that they had been formally placed within the F. Sos. Act by 2 Wm. IV. c. 37. They complain besides that the Act requires T., a bond from the treasurer; that a member may not belong to 2 Sos.; that Sos. should be forced to make returns to the Registrar; and that they should not be allowed to lay out their money in land.

The Committee admit that they see no good reason why the limitation as to the amount of the annu. on sickness may not be withdrawn in the next Bill, “if only care be taken to require that the T. for such annu., where the amount of such annu. is certain, be calculated by a competent actuary, and the contributions be kept distinct.” On the other heads of complaint the Committee thought that the case of these long-estab. Sos. was *deserving of a special Act*; and that it was not advisable to alter the general law in order to accommodate their requirements, “however unobjectionable, or praiseworthy, they may be.”

2. A petition has been presented from 83 Assu. Cos. complaining that certain 5 F. Sos., estab. under to Geo. IV. c. 56, before the year 1840, claim to have the power to make their pol., by a clause in the pol., payable to widow or widower, or child of a member, to any amount; and that such pol. are exempt from legacy and probate duty; that these Sos. have ceased to possess the character for which Parl. granted privileges; that they have an unfair advantage, from being constituted under the F. Sos. Act, which is equivalent to a Charter, being in reality Trading Life Assu. Cos.; and they ask to have such Sos. confined in their transactions to the limits prescribed by the Act, namely, of £100, or compelled to be reconstituted in the same manner as other Life Cos.

The 5 Life Offices here referred to were: 1. *Clergy Mut.* 2. *Friends Prov.* 3. *Prov. Clerks.* 4. *National Prov.* [called in Rep. *National Benevolent*]. 5. *United Kingdom Provident.* We believe, as a matter of fact, there were several others. (See 1854.)

Your Committee examined several witnesses in support of this view, as well as other witnesses on the part of the Sos. against whom the complaint was laid; and they refer the House to the evidence, which is of an interesting and curious nature.

It is also to be borne in mind, that the security and good man. of a So. depend in no small degree upon the amount of their transactions, and of their revenue; and it is desirable therefore to induce the poorer class to insure in Sos. in which the richer also insure; and these 5 Sos. have beyond question conducted in a very material degree to extend downwards in the scale of society a knowledge of the principle of mut. assu., and a disposition to embrace the advantage of it.

The other alternative your Committee incline to recommend to the attention of Parl., namely, to allow the privilege of exemption from stamps and probate and legacy duty, to the pol. of all Life Assu. Offices, as well as F. Sos., to the amount of £500. This amount is taken, because, whatever limit may be fixed upon, that will virtually be the limit of the provisions made for their families

Your Committee have more clearly defined the duties of the Registrar, by omitting certain discretionary words, which have sometimes led to imputations of a want of uniformity in his decisions. They have also erased from the Bill the fees hitherto payable upon regis.—for this reason, that since Parl. has withdrawn the principal privileges which formerly were an inducement to Sos. to register, it seems to the Committee a mistaken policy to deter them by fee, which, though trifling in amount, is sometimes a real obstacle, sometimes a plea, with the man. of Sos. for abstaining from taking the steps necessary for acquiring a legal character.

In regard to the settlement of disputes, your Committee have followed the existing law, by declaring that they shall be settled in such a manner as the rules shall direct—whether that be by a method of appeal amongst the members, or by arbitration, or by Justices, or by the County Court. Questions respecting the removal of a trustee, or a misapplication of funds, your Committee refer to the County Court; but in case any officer or member should fraudulently obtain possession of the moneys or securities of any F. So., immediate recourse may still be had without delay to a Justice, but the misdoer might escape before the Judge of the County Court should hold his next sittings, or be in a condition to interfere.

The subject of "Child Murder" in view of obtaining money from Burial Sos. is next considered. This part of the subject falls to be considered by us under INFANT MORT.; but we propose to give the brief result of the conclusion of this Committee thereon here:

Your Committee refer to the evidence to show that no sufficient grounds exist for the general suspicion which seems to have been entertained on this subject. They believe that suspicion has been almost entirely founded on the few cases brought to trial, exaggerated by the horror with which the idea of a crime so heinous would naturally be regarded.

The remedy of the Committee was to fix a limit upon the amount which might be insured upon the life of a child. The illegal nature of ins. contracts where no real insurable interest exists had been pointed out by some of the legal witnesses called:

One other subject only remains to be noticed in this Rep., namely, the anomalous position of Sos. orig. enrolled under F. Sos. Acts *before there was any limit fixed beyond which it should be illegal to carry their operations.* Several Sos. so enrolled have conducted their bus. to an extent similar to that of assu. cos. All the privileges granted by their orig. Acts have one by one been repealed: the chief of these were a power of investing with the National Debt Commissioners at an advanced rate of int., exemption from stamp duty, and the right of leaving money payable on the death of a member to his nominee. Whilst these privileges have been withdrawn, these Sos. have still been under restrictions which are not imposed upon other assu. cos. regis. under the Joint-Stock Cos. Act. Their case was fully entered into by a Select Committee which sat in 1852, and in the evidence then reported all particulars may be learned.

Your Committee concur with that former Committee in thinking that these Sos. should be dealt with exceptionally, and that an Act should be passed withdrawing them altogether from the provisions of the F. Sos. Act, except such as are indispensable for the maintenance and protection of their orig. constitution, which it would be a violation of the faith of Parl. to destroy.

Your Committee have amended the Bill referred to them, and now report it to the House.

We have to notice a few special points in the evidence.

Mr. J. Tidd Pratt said (Q. 87) that the average number of rules which he had certified since the Act of 1850 had been about 1300, "but the major part of them are only chargeable with half-crown fees."

Mr. Samuel Moreton, Manager of two extensive Sos. in Birmingham, was called, and examined as follows:

1646. Are you able to state what would be the effect in Birmingham of the 4th clause [rendering regis. compulsory] if it became the law of the land?—... It would destroy something like 300 Sos. in Birmingham entirely. There are a great number of Sos., perhaps 500 altogether, which exist in manufactories only, having no real governing body among them. But they are of great assistance to working men. The money is received, perhaps by the head clerk of the estab. on the Saturday evening in small amounts, say 3d. or 4d.; it would be impossible for those Sos. to enrol; they could not enrol inasmuch as the members only remain members so long as they work at the manufactory—consequently, if a man worked at 10 manufactories in the course of 4 or 5 years, he would be compelled to become a member of 10 different Sos., which he could not do under any circumstances, and he may be too old to enter fresh Sos. Again, it would destroy them, because the machinery requisite to conduct an enrolled So. would be too expensive and too complicated for a So. in a manufactory. Again, many Sos. that I represent have to deal with the money at their command in different ways (and they have never had occasion to appeal to the law in any way). They have money out in forms and shapes which the present Bill would discountenance. For instance, many of our Sos. have what are termed loan funds. This is a fund consisting of a certain amount of the cap. of the So., from which amounts varying from £5 to £15 are lent to the members, on a bond-note; this is paid back by fortnightly instalments, running over a period of 12 months, and for the use of which 5 p.c. is charged, and paid when the loan is taken out. This brings a good revenue to the So. One So. has as much as £700, another £800, invested in this way among its members. Supposing the Act came into operation next Jan., it will be impossible to get this money in. There are many other objections; but without entering into any selfish objections, and saying this is a gross attack upon our liberties, we are prepared to show . . . that we are fully able to govern ourselves. We have many objections to enrolment: we object to Revising Barristers, or those who have the care of revising our art., because they make alterations in our laws which are altogether unsuited to the members in every shape. I speak now from facts that have occurred in Sos. that were enrolled, and have now broken through the enrolment. They submitted at different times alterations of their rules to Mr. Tidd Pratt, and he would not allow those alterations to be made.

Mr. Arthur Scratchley, M.A., was examined, in substance as follows:

1766. A paper containing 3 clauses has been offered to the Committee by one of the members, Mr. Fitzgerald: can you give the Committee any information in respect to the first of them, and why it is rendered desirable?—The reason why I brought under the attention of Mr. Fitzgerald the desirableness of such a clause being passed is this. The man. of a great many F. Sos. in Eng. which are connected with the F. Sos. Inst. have felt for a long time that F. Sos. have not been able to succeed from their failing in the early years of their existence [to obtain a sufficiency of members?]; and they have considered in what way they could get over these first years so as to arrive [at] the time at which there would be enough members to enable them to succeed. They have looked to similar inst.—the ins. cos. of Lond., which deal with risks arising from the laws of average; but which have generally considered it necessary to have a protective cap., commonly called proprietors' cap. And they have felt that although life assu. may have been found, by experience, not to require, under certain

for the accuracy of those T.; and if there was a failure, either from mismanagement or any other cause, there might be some claim by that So. upon the Gov. (1321).

The number of F. Sos. having deposit accounts with the Commissioners of the National Debt direct was only between 500 and 600 (1399); but the total having deposits with Savings Banks were between 700 and 800 (1463). It appeared from the evidence, although it was not directly so stated, that a So. so depositing might, by watching the fluctuations in the funds, and regulating its deposits and withdrawals accordingly, secure a profit by the operation. (*Vide* evidence of Sir A. Spearman.)

Mr. Charles Jellicoe intimated to the Committee that the Highland So. of Scot., finding that its T. (pub. 1824) were not to be depended upon, had withdrawn them, and given notice to that effect; and had requested the Inst. of Act. to look into the matter with a view to supply other T., "or to suggest such other means of regulating the Sos. as may be best calculated for their welfare." He made a very practical suggestion as to the law of F. Sos., viz.: "that in any future Act relating to F. Sos., instead of reference being made to previous Acts, *all the previous Acts might be repealed*, and that the new Act should recite that Sos. formed between the years so and so, should have such and such privileges—mentioning the privileges—and that other Sos., estab. in succeeding periods, should have such and such privileges—again mentioning them—so that the great obscurity occasioned by the Act of Parl. repealing Acts which repeal part of other Acts, might be in some degree avoided."

This year there was presented to Parl. and ordered to be printed: *Abstract of Returns respecting F. Sos. in E. and W. during the 5 Years ending 31 Dec. 1850*. These had been obtained, in reply to, and upon forms sent out by the Regis. of F. Sos. pursuant to the requirements of the Acts of 1829, 1840, and 1846. In the introduction to this important document, it is set forth:

The returns received have been carefully abstracted, under the direction of the Regis. of F. Sos. in Eng.

Those classed as "perfect returns" contain the information which renders them useful in making a comparison with existing data for the formation of T. of contributions and allowances in cases of sickness, etc. The "imperfect returns" are such as could not be used for such purposes in consequence of some important information being omitted; but an account of them has been inserted to show the number of members in the respective Sos., the amount of funds, etc.

The actual amount of sickness experienced by the members of any So. cannot be ascertained, but only the length of time during which sick pay has been claimed. To ascertain the true amount of sickness, a deduction should be made for cases of imposition by feigning sickness; an add. for those who do not claim sick pay, although entitled to do so; and another add. on account of some forms of sickness for which no pay is allowed. A rule (which is very common) that a member in arrears for a certain time shall be suspended from being entitled to pay, although he may be ill, is another cause preventing the actual amount of sickness from being known. It appears therefore that the ratio of sickness in F. Sos., being of such a peculiar character, can only be ascertained from returns of their own experience.

The term "sickness" has one common meaning in all F. Sos.; but "superannuation" has a widely different signification in some Sos. to what it has in others. Superannuation pay is allowed in some only on account of total incapacity from work arising from age; in others, a member, although young, may be superannuated after being on the sick list for a lengthened period; and in others superannuation pay is allowed to each member who survives a certain age. Under these circumstances no account has been taken in the "Abstract" of the superannuated members, except that they are included in the "total number of members at the end of 1850."

With respect to the Report of the "Assets" and "Liabilities," it has been found that in some Sos. a portion of the funds has been invested in various securities unauthorized by the Acts of Parl. relating to F. Sos., and contrary thereto—among which may be mentioned investments at int. in the hands of Breeding, Banking, and other mercantile firms, in Shares in Building Sos., in Turnpike Trust Securities, in the Scrip of various Public Cos., etc. As it was not deemed advisable to provide a separate col. in the Abstract for the purpose of entering "illegal investments" where they have occurred, they have been included in the first col. relating to the funds headed "Funds invested on Real or Heritable Securities, or Heritable Property, etc."; and they are included in the col. of "Total Funds."

The returns have been arranged in counties. A reference has been made to such Sos. as have had their T. certified by an actuary, whether the So. is composed of males, females, or of both, etc.

Finally, it is stated that it was almost impossible to ascertain the number of F. Sos. which were then in existence. There was no authentic account of the Sos. enrolled under the Act of 1793, and the other Acts previous to 1828. The following T. shows the numbers regis. between 1828 and 1847. [See T. on page 472.]

Here then we have evidence of 10,433 F. Sos. in E. and W. [it is a great pity that returns could not be obtained for Scotland and Ireland at the same time], of which 9497 were in England and 936 in Wales. Of the Eng. Sos. 3934 had sent in returns; of the Welsh Sos. 357. The aggregate number of members in the Eng. Sos. was 740,581; in the Welsh Sos. 41,141; total, 781,222. The contributions received from members during the year ending July, 1847, was in Eng., £662,082; in Wales, £31,669; total, £693,751. The amount disbursed to members, during the same period, was in Eng., £491,462; in Wales, £27,516; total, £518,978.

But it is further pointed out that there were a very large number of F. Sos. having a great number of members, and a considerable income, that were not enrolled, and concerning which therefore no detailed information could be obtained. Then, again, from 8 July, 1847, to 23 Nov. 1852, the number of F. Sos. whose rules had been enrolled was about 5520—this brought up the total number of enrolled F. Sos. to about 16,000. There had, however, prob. been some duplicate enrolments. The returns had been brought up to 31 Dec. 1850.

Friendly Societies in England and Wales, Enrolled between 1828 and 1847.

Counties.	No. of Societies.	No. of Returns received.	No. of Members on 8 July, 1847.	Amount of Money received from Members during year ending 8 July, 1847.	Amount of Money paid to or on account of Members during the same period.
<i>England.</i>					
Bedfordshire	155	71	5,578	£ 4,492	£ 3,964
Berkshire	118	57	4,635	3,703	2,548
Buckinghamshire	138	65	6,076	5,202	3,770
Cambridgeshire	125	55	3,461	4,305	3,220
Cheshire	254	118	17,800	13,719	12,305
Cornwall	167	95	12,395	9,443	8,328
Cumberland	30	16	2,120	1,506	1,308
Derbyshire	128	59	5,734	4,317	4,095
Devonshire	362	193	29,768	34,457	29,521
Dorsetshire	126	63	6,810	5,348	4,192
Durham	217	58	6,627	5,523	4,870
Essex	274	98	16,459	18,229	15,172
Gloucestershire	236	103	11,210	14,227	10,732
Hampshire	301	149	24,760	20,921	19,302
Herefordshire	45	18	821	686	992
Hertfordshire	94	46	5,289	6,054	4,917
Huntingdonshire	65	41	2,429	2,175	1,904
Kent	313	190	29,810	27,857	24,304
Lancashire	620	293	258,095	71,200	66,869
Leicestershire	137	75	5,606	4,552	4,563
Lincolnshire	111	67	5,814	5,620	5,386
London }	268	65	22,297	132,745	54,076
Middlesex }	1301	317	43,380	62,421	44,632
Monmouthshire	356	106	10,341	11,699	10,797
Norfolk	262	121	7,644	6,793	7,358
Northamptonshire	218	118	8,209	6,914	5,694
Northumberland	213	56	6,666	6,835	6,371
Nottinghamshire	59	34	2,734	4,359	3,371
Oxfordshire	111	55	3,468	3,335	1,965
Rutlandshire	11	7	624	476	388
Shropshire	198	90	12,639	8,167	7,321
Somersetshire	218	96	10,400	7,535	5,802
Staffordshire	445	201	27,639	25,291	20,578
Suffolk	265	110	9,994	27,313	20,929
Surrey	324	114	15,475	16,175	14,975
Sussex	90	49	5,891	4,886	3,664
Warwickshire	336	130	16,381	12,054	8,513
Westmorland	3	3	232	195	226
Wiltshire	135	53	7,358	3,704	2,500
Worcestershire	214	86	5,437	5,175	3,963
Yorkshire	454	193	63,315	52,374	37,077
Total	9497	3934	740,581	662,082	491,462
<i>Wales.</i>					
Anglesea	34	14	1,808	1,217	899
Breconshire	147	48	4,907	5,079	3,838
Cardiganshire	76	26	2,565	1,414	1,029
Carmarthenshire	76	28	2,031	1,485	1,275
Carnarvonshire	46	23	3,595	2,479	2,033
Denbighshire	91	51	8,245	6,442	6,497
Flintshire	33	23	3,382	2,255	2,045
Glamorganshire	248	95	9,097	7,141	6,231
Merionethshire	48	19	2,165	1,216	931
Montgomeryshire	57	—	—	—	—
Pembrokeshire	69	26	2,891	2,618	2,393
Radnorshire	11	4	455	323	345
Total	936	357	41,141	31,669	27,516
Total of Eng. & Wales.....	10,433	4291	781,722	693,751	518,978

Mr. J. Tidd Pratt said before the Select Parl. Committee of this year, in respect to these returns :

674. . . . From the returns I have now in my possession, from nearly 3000 Sos., containing the date of the estab. of each, the ages between which each member is admitted, his trade and occupation ; much valuable information may be obtained. These returns have been arranged according to the different counties in E. and W. ; and an abstract of them is now preparing under my direction : and the number of days of sickness in each year during the last 5 years, and the number of deaths, is preparing to be laid before the House of Commons ; and I would suggest that the whole of these returns should be laid before the Inst. of Act., who I have no doubt will be able to direct the formation of such a set of T. as would have the effect of satisfying the minds of parties forming these Sos., with reference to the great difference there is now existing between the T. of different actuaries.

He afterwards (Q. 1254) stated that these returns related to about 300,000 individuals—referring to the correct returns.

A correspondence took place between the Registrar of F. Sos. and the Inst. of Act. regarding these returns. The Reg. in July of this year announced his possession of the data, and asked the Inst. "whether there was a necessity at that time for further data on the subject of sickness and mort., especially with reference to the members of F. Sos. ; and if so, whether the 40 vols. of information [of which one was sent as a sample] could be used beneficially for such an object as providing more data or not," with a view to such opinion being laid before the Lords of the Treasury. It was inquired whether the Council would consent to superintend the preparation of such data, and the subsequent compilation of T. The gen. opinion of the Council on the subject was also requested. The reply was in substance as follows :

The Council, admitting that some very valuable information had already been collected on the subject, thought that the favourable opportunity now presented of classifying the large body of more recent facts returned to the Gov. order should not be lost ; and taking it for granted that there existed, as represented, perfect returns of sickness and mort. experienced among 300,000 members for the last 5 years, the Council of the Inst. would undertake the public trust of analyzing these returns, and of forming from them a set of T. of money values for rates of allowance in sickness, and for payment of given sums at death. If however it should hereafter appear that the use of the T. ought to be modified by the nature of the individual So., its particular locality, and special regulations, the Council would propose to append to the T. such obs. as would guard the public against their indiscriminate or injudicious application.

This correspondence was submitted to the Lords of the Treasury, who appeared to think that, "in a matter of this kind, it would upon the whole be better that the work should be undertaken by that department of the Gov. which is more immediately in connexion with F. Sos., and on the establishment of which department there is employed an officer specially conversant with such matters." The data was accordingly handed over to Mr. A. G. Finlaison for treatment ; and his Reports thereon will be spoken of under date 1853 and 1854.

Mr. H. Tompkins read before the Inst. of Act. this year a paper : *Remarks upon the Present State of Information Relating to the Laws of Sickness and Mort., as Exemplified in the T. of Contributions, etc., used by F. Sos. ; and the same is pub. in Assu. Mag. vol. iii. p. 7.* The author says : "One of the most important problems of social statistics, after the questions of food and labour, is to determine the ratio of sickness ;" and he then passes under review the various attempts which had been made in this direction.

The author expressed his belief that the "rate of mortality and the rate of sickness, generally speaking, are fixed rates," which drew from the Editors of the *Assu. Mag.* the following obs. :

There is reason to believe that these rates differ in every association, not widely perhaps, but characteristically. Independently of the locality of a So. and occupation of the individuals forming one, the mode of admitting members, and the grounds of exclusion ; the quantum of medical investigation ; the rules by which persons are admitted on the sick list or taken from it ; the position and character of the members who have the management ; and many other similar influences make themselves felt, and give a particular character to each. Even the average rates of sickness and mort. throughout the country cannot be considered as ever "fixed." No doubt they may remain invariable for years ; but time may still produce changes, as we have reason to believe it has done already. Such being the case, there is of course great room for difference of opinion as to the rates which should be selected in any particular instance ; and it is quite possible that good reasons might be found for the discrepancies which Mr. Tompkins points out, and that dissimilarities exist, either in the circumstances or in the constitution of these Sos., which would naturally escape the observation of all but an experienced actuary. It is, however, undoubtedly true, that great inconvenience is felt from the want of sufficient data, especially as regards sickness—what has been collected on that head being, as Mr. Tompkins justly states, notoriously imperfect and insufficient ; and therefore it is undeniable that the making the valuable data collected with so much labour by Mr. Tidd Pratt accessible would be a great boon to the whole community.

As regards the general question, it is time that some steps were taken to place the F. Sos. of this country on a better footing ; for notwithstanding the laudable efforts made by the Government for years past, and the strenuous exertions of Mr. Sotherton, Mr. Bonham Carter, and other members of the Legislature, to bring about such changes in the law as might be calculated to improve their condition, nothing can, on the whole, be more unsatisfactory. *For our own part we are disposed to think that it would be wiser to discourage them, and to strive to induce the classes more immediately concerned with them to follow the example of their perhaps more intelligent fellows in the next and superior grades of life, who prefer to resort for similar objects to independent asso., established for the purpose of meeting their wants in this respect.* It is much to be feared that the good effected by F. Sos. bears no proportion to the loss and disappointment which their failure so frequently entails ; and it is to be doubted whether there can ever be that constancy and stability in the management of them which is essential to carry out and bring to completion contracts, which from their nature must be of many years duration. If asso. of this kind be indispensable to the classes from which F. Sos. are constituted, it would be well to base them on the most simple principles, leaving more

FRENCH SOCIETIES 1851

These organizations are of great value to those who are unable to work, and are especially so in the case of the F. S. S. which are organized throughout the country. The F. S. S. are organized in a way which is a model of efficiency, and the organization of these societies is a model of efficiency.

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In consequence of the want of adequate scientific arrangements at the time of their establishment, the F. S. S. have been very generally neglected in an extreme sense. In this many cases has been added a great amount of mismanagement, and as the consequence, great numbers of them are approaching to a state which will be ruinous to the members who are relying on them for support. The F. S. S. are organized in a way which is a model of efficiency, and the organization of these societies is a model of efficiency.

The remedy in this case would probably have been much worse than the disease.

Belgium.—There was this year put in Brussels: *Association de Bienfaisance de la Belgique*, from which, and from other sources, we propose to derive some information regarding the position of F. S. S. in Belgium at this time.

Mutual Aid Societies are especially instituted to assist sick working men. One kind confines itself to giving relief in money; another kind, smaller in number, adds to this medical assistance and medicine. Some also pay the funeral expenses, and give pecuniary relief to the family in case of death. The way of saving of these Societies is very ancient; others have only existed a few years. Some are instituted by the working classes themselves; others by their employers. Their organization is of infinite variety.

In a *Report* of 21st Jan. 1851, made by M. de Naeyer on the proposed law of M. de Naeyer in the session of the Chamber of Representatives is a detailed list of the F. S. S. of this class then existing in Belgium. This list contained the name of each Soc., its date of foundation, place of meeting, composition of the members, number of paid members, rates of contribution, nature of benefits afforded, amount of funds, etc. From it there appeared to be a total of 211 Societies, located in 35 towns and districts, and having 24,367 members. Several important localities, and two entire provinces, viz. Limbourg and Luxembourg, had no list of this kind.

The F. S. S. were at this date regulated by a law dated 3rd April, 1851. This law authorized the Gov. to recognize Mut. Aid Societies, of which the object was to assure temporary succour, either to the members in case of sickness, wounds or infirmities; or to the widows or families of deceased members; to provide for funeral expenses; to facilitate the accumulation of the members' savings for the purchase of necessities, provisions, or for other temporary necessities.

The recognized Societies for Mut. Aid enjoy the following advantages:

1. The power to sue and be sued; but when the affair exceeds the jurisdiction of the Judge de Paix (Justice of the Peace), they cannot plead without the authority of the permanent deputation of the Provincial Council, except they have recourse to the King, in case the authorization is refused. They can obtain exemption from the costs of procedure on conforming to the *arrête royal* (art. 6).

2. Exemption from stamp duties and registration fees of all deeds made in the name of the Soc. or in their favour. All certificates, notices of authorization or revocation, and others, which are required to be produced by the members, shall be delivered gratis, and exempt from such fees and duties.

3. Power to receive donations or legacies of personal property by attending to the formalities prescribed by No. 3 of art. 76 of the Communal Law.

It was hoped that by means of this law the organization of the F. S. S. of Belgium might be placed upon a more solid, uniform, and extended foundation. It was also intended to encourage co-operative asso.

It appears that there exist in Belgium a number of *Provident Funds*, or superior F. S. S., instituted in favour of sick, wounded, infirm, and disabled workmen, their wives

and children. These embrace in their operations a variety of modes of assistance, which essentially distinguish them from the Mutual Aid Soss. These are usually promoted among persons engaged in special occupations or industries, or whose labour exposes them to especial dangers. Of these there are several kinds, of which we shall speak in their order.

1. *Provident Soss. for Miners.*—There were 6 of these Soss. in existence; the first dating back to 1839; 3 were formed in 1840; and 2 in 1841. These provide pensions for life, and also temporary pensions. The *pensions for life* are allotted, 1st, to workmen rendered incapable of work by reason of wounds received, or by accidents happening, while they were at work, either within or without the mine; 2nd, to widows of workmen who had perished by accident in a mine; 3rd, to the father and mother, grandfather or grandmother, of workmen who had perished by accident in a mine, when, not being able to provide for themselves, they had no support but the deceased. The *temporary pensions* are accorded, 1st, to the infant children of a widow whose husband has perished by accident while working in a mine; 2nd, to the orphan without father or mother, whose father or mother, the last survivor, has perished by accident in a mine, when they are in need and the deceased was their principal support. The pensions referred to in these cases cease as soon as the children attain the age of 12 years, except in case of sickness, or infirmity duly proved by the certificate of the doctor.

The funds are made up from the following sources—1. Deduction from the wages of the miner. 2. The aid given by the proprietors of the mines. 3. The allowances granted by the Province and the Gov. 4. Int. on capital and extraordinary receipts. 5. Gifts, legacies, etc.

The deduction made from the miners' wages for the fund at *Hainault*, fixed orig. at $\frac{1}{4}$ p.c., had been raised to $\frac{3}{4}$ p.c.; and that for *Namur* to 1 p.c. The aid given by the proprietors of the mines is equal to the deduction made on the miners' wages. In the fund of *Hainault* and *Luxembourg* there existed a reserved fund, produced by a deduction of 10 p.c. on their receipts, in order to provide for expenses which might be occasioned by extraordinary accidents. A part of this fund might be applied to ameliorate the moral condition of the workmen, and to propagate instruction among their children. Lastly, the rules prescribe the formation, in each mine of the Asso., of a fund of their own, destined to relieve the wants of the sick or wounded miner.

The organization of these funds is made to correspond with the object of their creation, as far as may be. The assistance is voluntary on the part of the proprietors; the participation of the miner is assured in each mine by the rules of the estab. *The Gov. overlooks the whole, and encourages adhesions to the Asso. by the grant of subsidies proportioned to the importance and wants of each fund.*

The sum total of the receipts of the district funds, and of the separate funds, amounted in 1850 to £29,223. The sum total expended was £26,666, in which was included a sum of £442, appropriated to the instruction of the children of miners. On 1st Jan. 1851, they possessed reserves amounting to £41,583. The fixed liabilities by way of pensions, etc., were £8358.

The number of workmen employed in the mines and the wages received is shown as follows:

1847	workmen employed	48,000	wages received	£1,050,216
1848	"	43,400	"	791,684
1849	"	45,100	"	740,857
1850	"	47,319	"	864,904

These were employed in 305 mines.

In 1847 the contributions from the miners was 65 p.c. of the whole fund; from the proprietors 25; from Gov. and other resources 10 p.c. In 1850 the respective proportions were 59, 27, and 14 p.c. The average payments by each workman were, in 1847, 9s.; in 1850, 7s. 8d.; by the proprietors in the same years 3s. 2d. and 3s. 4d.

The principal promoter of these Mining Funds was M. Visschers, member of the Council of Mines, whose writings upon Provident Asso. are widely known. And notwithstanding some admitted imperfections, the system has been of great value to the classes for whose benefit they were introduced.

The general resemblance of the *Northumberland and Durham Miners Asso.*, 1862, to these Asso., will not escape notice.

2. *Provident Soss. for Workmen employed on the State Railways.*—By Royal Ordinance of 1st Sept. 1838, a fund was estab. in favour of the workmen employed on the State Railways. This fund afforded temporary succour to workmen rendered for a time incapable of working, as well as to their widows and children not capable of providing for themselves; but it did not admit the principle of a pension, or permanent succour, tending to ameliorate the condition of workmen who, by reason of infirmity, sickness or wounds, became thenceforth continuously incapable of working.

The revenues of the fund were orig. built up by a deduction of 1 p.c. on the wages of all the workmen employed on these railways. Under the regulations of 1 July, 1845, supplemented by those of 14 Aug. and 11 Sept. 1846, the deduction is 2 p.c.; and a reserved fund has been raised to provide against unforeseen and extraordinary demands. The fund is administered gratuitously by a Committee of 10 members, chosen from among the officers and workmen of railways.

at ages exceeding 53 years is 40 p.c. greater, according to Mr. Neison, than it was according to Mr. Finlaison. The alleged mort. being equal in the two cases, it would follow that the sickness of a pop. can be greatly increased without the deaths being simultaneously increased—a conclusion opposed to all experience. It is nearly certain that the extra 40 p.c. of sickness observed by Mr. Neison represents the life time of all superannuated members, which life time is altogether excluded from his obs. by Mr. Finlaison. If one-half of all superannuation-time be true sickness, Mr. Neison's obs., as compared with Mr. Finlaison's, will contain an extra 20 p.c. of true sickness, without any extra per-centage of deaths. If, however, an add. to the deaths (for omissions in the returns) be made, proportionate to the extra per-centage of the true sickness observed by Mr. Neison, the resulting mortalities of all three obs. will be in harmony with each other, and conformable to expectation.

It is also to be remarked that if the mort. of members of F. Sos. is influenced by "selection"—as is prob. the fact—there will be add. reason for doubting the truth of the statement in question: for the statement of Mr. Neison and Mr. Finlaison is, that in F. Sos. the mort. in the period of florescence, as well as in the period of senescence, is 20 p.c. less than that of the total male pop. of Eng. of the same age. The former part of this statement is prob.; but the latter part is inconsistent with the former part, and the known ordinary effects of selection of good lives from the ordinary mass. In F. Sos. the great majority of the members are admitted below the age of 35 years; so that the effect of selection, being limited to about 15 years from admission, does not extend to the period of age exceeding 53 years. Assuming the reduction of 20 p.c. in the mort. during the period of florescence to be caused by "selection," there ought to be no difference in the period of senescence between the mort. of members of F. Sos. and the mort. of the classes from which the members have been selected. It may be useful here to remark, that a reduction through selection of 20 p.c. in the mort. for the period of florescence is equivalent in appearance to a retrogression of 4 years in the limit at which the period of senescence commences. If, as is the fact, this limit in the total male pop. of Eng. is at the age of 53 years, the corresponding position of this limit in F. Sos. affected by selection in the degree mentioned would be at the age of 49 years.

Other points in this valuable paper will be referred to in detail under LOCALITY; OCCUPATION; and under TOWN LIFE; while again under SICKNESS yet further points will arise for consideration. The preceding is deemed necessary to a full understanding of the T. here passed under review.

Mr. Samuel Brown read before the Inst. of Act. a paper: *On the Rate of Sickness and Mort. amongst the Members of F. Sos. in France*. The main contents of this paper will be noticed under F. SOS., MORT. AND SICKNESS EXPERIENCE OF; but the introductory passages should find a place here:

It is not without some degree of pride that we recall the fact that England has taken the lead in fostering and extending those social inst. which appear destined to carry out the beneficent design of procuring the greatest possible amount of happiness for the greatest possible number. She has not been afraid to encourage a spirit of self-reliance in the mass of the people, and to allow her working classes to associate freely in the effort to equalize the uncertainties of life, so that those who may have a little better fortune than the average may assist those who have a little less. Now and then indications may have been observed of fear amongst the ruling powers lest this asso. should be used for political purposes, and doctrines dangerous to the Gov. or the good order of society be thereby enabled to circulate too easily amongst classes who may have real wrongs to redress or fancied rights to assert; but in the long run good sense has prevailed, and Gov. has fortunately perceived that F. Sos. for mut. aid in sickness or want, and other asso. for bettering the condition of the working classes, give them a direct int. in the preservation of the public peace, and formed by their very principles the antidote to the fears they had excited. It would be gratifying, therefore, to perceive the rapidity with which they have spread in this country, could we at the same time feel that they have been conducted as well as they have been designed; and in their pecuniary point of view not fallen short of the expectations they have raised. The contrary has been lamentably the case.

He proceeds to review the causes which had led to such widespread failure. There can be no doubt (he says) that the great cause of this wretched condition of F. Sos. was "the want of data for a correct estimation of the risks, the ignorance of the managers of the rapid growth of their liabilities with the age of the members, the smallness of the numbers in each club (which probably arose from the desire which so many of the members had to be office-bearers), and the consequent inordinate expenses when compared with the income. These evils were found to prevail even in the best regulated."

Notwithstanding these serious drawbacks (he continues), "the benefits derived from the system have been so great, these unions are so adapted to the wants of the working classes, and have such an inherent vitality of good in them, that the evils complained of have been gradually removed, or are in process of it, and the defects of information are every year being supplied." He reviews the evils which had arisen in the early period from want of data, and shows how these were now overcome by the large contributions obtained by various recent writers. He then proceeds:

By the side of these large and important collections for this country, the obs. in *France*, to which I now beg to call your attention, appear very trifling. They are nevertheless important, as being the first fruits of a direct inquiry made with the laudable purpose of encouraging in France the increase of inst. which it is admitted owe their greatest development there to the example of Eng. Both in this and in the kindred subject of life assu., our neighbours, now so nobly emulous with us in the glories of war, are commencing a still more honourable rivalry in the arts and enterprises of peace, and in the social improvements which confer more than glory, in diffusing happiness amongst the people.

For the progress actually made with F. Sos. in *France*, see FRANCE, sub-heading F. Sos. (See 1864.)

During this year, too, the late Herr Rath G. Hopf, of the *Gotha Life Assu. Bank*, contributed to the *Assu. Mag.* [vol. v. p. 324] a paper on the operations of that asso. during the first 25 years of its existence; and after giving a comparative T. of mort. experience, wherein the results of *Neison's* and of *Finlaison's* obs. on F. Sos. were included, he says:

Every reader will be struck by the very trifling mort. amongst the members of F. Sos. in England. Though these Sos. comprise in a great measure only tradesmen, workmen in manufactories, and

A paper was read before the Brit. Asso. this year by Mr. Neison: *Mort. of the Provident Classes in this Country and on the Continent*, wherein some of the statistics already passed under review are given, with others mentioned in other parts of this work. An abstract of the paper appears in the Trans. of the Asso. for this year. The paper itself in a more complete form appears in the Journ. of the Statistical So. of Lond., vol. xiii. p. 313.

Mr. Arthur Scratchley, M.A., pub.: *A Short Treatise on the Formation of F. Sos. under the new Act of Parl. (1850) relating thereto*. A great deal of useful information was contained therein.

Among the other pub. of the year were; 1. Mr. W. T. Thomson: *Obs. on the Formation of F. Sos.* 2. Mr. T. Sopwith: *The Sound Principles of F. Sos.* 3. *Mort. Experience of the Builders So.*, by Thomas Piper. 4. *Rep. on the Preston District of Odd Fellows.* 5. A pamph. by Mr. G. Greig: *Are F. Sos., Secret Orders, etc., Safe? Answer, No!*

Mr. Wm. Paterson, Barrister-at-Law, pub. *The New Friendly Sos. Act, 13 & 14 Vict. c. 115, with Introduction, Notes, and a Copious Index*. This was a useful little book at the date of pub.

Royal Liver.—An event of this year was the founding of the *Royal Liver F. So.* at *Liverpool*. It is in its main features a Burial So.—that is, it insures sums payable at death, ostensibly for the purpose of funeral expenses. But it has, or had, a sickness branch. The growth of the So. has been rapid beyond all precedent. It is an enrolled So. [See *Loyal Philanthropic F. So.* 1844.]

The man. of the So. is nominally representative; but in practice it appears to be despotic. The "collectors" appear to control the voting power.

By 1863 the So. had 80,000 members; the income of its burial branch was £77,315; of its sickness branch £3746 only. Its expenses of man. were then very heavy.

By 1865 its income was £106,471.

The following figures give an outline of its financial condition and progress down to 1867; at which date the So. had paid for 65,095 funerals of its members; and in add. had made 10,389 grants in excess of members not legally entitled to benefit.

Funeral Allowances and Grants to Members.	Sick Pay, Doctors' Allowances, etc.	Total.	Yearly Increase of Profits over Expenditure.	Amount of Reserve.
1860				£ 15,272
1861 £ 8,810 15 0	£ 1549 5 5	£ 10,360 0 5	£ 2,732	18,004
1862 23,469 5 0	2731 13 0	26,700 18 0	7,625	25,630
1863 31,746 13 3	2963 11 9	24,710 5 0	13,405	39,036
1864 41,470 12 2	3544 6 11	45,014 19 1	16,423	55,460
1865 47,309 18 5	3634 7 8	50,944 6 1	22,566	78,026
1866 56,712 6 9	3321 7 3	60,033 14 0	25,328	103,355
1867 65,526 2 9	3218 0 0	68,744 2 9	29,017	132,372
		296,008 5 4		

The accounts are made up 30th June each year.

In 1868 the So. spent a considerable sum in opposing Lord Lichfield's Bill in Parl. this year. (See 1868.) This year too Mr. Bretherton pub. a pamph. on the affairs of the So.

About this date Mr. T. B. Sprague, M.A., made an investigation into the London bus. of the So.; and as a result became "thoroughly satisfied the So. was perfectly sound and solvent," *vide* evidence before F. Sos. Commission, 1870, Second Rep. part 2, p. 84. There was printed a document: *Mr. Sprague's Second Rep.*, wherein he advises upon a course to be pursued in view of getting the registers of the So. into a more perfect form.

By 1870 the So. had 550,000 members, "scattered all over the kingdom," with some in *America* and *Canada*. The income was then £164,402; its assets £220,120.

During this year the So. adopted some new rules, among which was the following, allowing the Committee of Man.—

To apply for or oppose any Bill or proceeding in, or emanating from Parl. which they consider desirable for the interest of the So. They shall also do all other acts and things whatsoever to the best of their judgment are necessary for the management and general welfare of the said So., and the direction, management, and government of the officers and servants of the said So., save and except as they may be restricted or governed by any rule hereinafter set forth, etc.

The earlier part of the rule was understood to have reference to attempts which the managers had made to secure Parl. powers; but it is clear that it also had reference to impending opposition to the especial class of bus. it transacts. (See 1869.)

In June, 1871, the So. had about 600,000 members. Its income from the burial branch was £176,053. Of this, 40 p.c., or £70,421, was set aside for expenses of man.; and was stated to have all been expended with the exception of £3353. This was the first year in which the details of the expenses of man. were printed. In the earlier years of the So. they had been as high as 55 p.c. Its accumulated fund at this date stood at £264,795.

The Hon. E. Lyulph Stanley, in Rep. as Assistant Commissioner (to F. Sos. Commission of 1870), pub. 1874, says, p. 28:

The *Royal Liver* has also a sick depart., but, like the other collecting Sos., it soon found out that it could not work this branch profitably; and as the funds have not been kept separate, a great deal has been spent from the death fund to keep alive the sick depart., in which, however, no new members are admitted—and from which all members are being rapidly excluded by the very heavy lines, amounting now to about 3 times the regular subs., imposed according to rule, in order to meet the liabilities. I see no reason to doubt that at present and for the future the affairs of the *Royal Liver* are and will be conducted with the intention of insuring efficient man. on the part of subordinates, except in the cases where family feeling on the part of the Committee interferes to shield a wrong-doer.

Mr. Sprague has made investigations into and valuations of other portions of the So.'s bus. since 1868, viz. in 1872 a Rep. upon the position of the "Endowment Fund" of the So. In 1875: *Rep. on the Mort. among the Infants whose Lives are Insured in the Royal Liver F. So.* And in 1876 a Valuation of the Burial Branch of the So.'s bus., to which we shall refer in some detail.

This last Rep. of Mr. Sprague contains information of much interest. In the first place it furnishes the following T., which may be regarded as something like a continuation of the T. already given, which only extends down to 1867. The present T., however, applies only to the "Burial Branch" of the So., which we see embraces the main portion of the operations of the So.

Table showing the Progress of the Burial Branch of the Royal Liver F. So. from 1869 to 1874 inclusive:

Years, etc.	Collections or, Prems.	Claims and Grants.	Accumulated Fund.	Expenses.	Per-centage of expenses to Prems.
	£	£	£	£	
Year ending 30 June, 1869	157,763	76,626	176,982	60,114	38.1
" " 1870	164,403	80,959	200,120	63,295	38.5
" " 1871	176,053	89,317	223,911	65,932	37.4
" " 1872	183,222	86,428	256,216	68,777	37.4
Six months, 31 Dec. 1872	95,249	41,030	279,612	35,591	37.4
Year ending 31 Dec. 1873	192,441	89,257	318,531	74,959	39.0
" " 1874	204,937	100,604	354,882	81,738	39.9

These figures, Mr. Sprague remarks, "not only show a steady growth of the So.'s income, but a more rapid increase in the accumulated fund. They show that while the magnitude of the So.'s transactions has been steadily increasing, a substantial reserve has been made from year to year to meet the increasing liability to the members." He continues:

There are certain points, however, upon which the ann. accounts can give no information—in particular, as to the number of members on the books from time to time, the total amount of ins. on their lives, and the liability of the So. under those ins. If we wish to know whether the assets of the So. are sufficient to enable it to meet its ultimate liabilities under the ins. in force, whether the assets are increasing at a faster rate than the liabilities, whether there is at the present time a surplus of assets beyond the liabilities, or a fair prospect of such a surplus existing at a future time—for information on these and similar points, we must make what is technically known as an actuarial valuation of the liabilities.

The importance of having such a valuation periodically, made upon strict principles, was fully recognized by you in the year 1870, when the Rule quoted above was adopted; and this object has been ever since steadily kept in view. It was felt that although the accounts of receipts and expenditure pub. ann. would be sufficient to prove to the members that the So. is successfully and prudently managed, yet something more was necessary to prove that the So. is in a sound and healthy condition; and to satisfy both yourselves and your critics, whether friendly or unfriendly, that the So. is really in a position to fulfil its engagements, and pay its members the full benefits it has promised them.

He then proceeds to state the data which he had drawn together from the books of the So. in view of a valuation of the Burial Branch as at 31 Dec. 1873. There were then 643,122 insurances remaining in force upon the lives of 632,211 members. The total sum insured was £4,842,854 12s. 11d.—the contributions of the members in respect of these being £3790 2s. 7d. p. week; thus representing an ann. income of £197,628 3s. 3d. Comparing these figures with the corresponding figures at end of 1871, it was seen that during the two years the number of pol. had increased by no less than 44,045; the increase in the total sum insured was £563,707; and the increase of the ann. prem. income £14,518.

In estimating the liability under the insurances as at 31 Dec. 1873, he had altogether excluded from consideration the insurances on the lives of children under 11. These were 178,122 in number, and insured £642,368 15s.—the weekly payments in respect of them being £714 1s. 1d., which represented an ann. prem. income of £37,232 16s. 6d. "Ins. on the lives of adults involve a liability continually increasing with the standing of the ins.; but this is not the case with these very young lives. I have, therefore, in my valuation, dealt only with ins. on the lives of members of the ages of 11 and upwards." These were 465,000 in number, insuring £4,200,485 17s. 11d.; and the weekly payments being £3076 1s. 6d.—which represents an ann. prem. income of £160,395 6s. 9d.

Valuing by a method explained in his Rep., he produced the following :

Valuation Bal. Sheet of the Burial Branch of the Royal Liver F. So. as at 31 Dec. 1873.

LIABILITIES—		ASSETS—	
	£ s. d.		£ s. d.
Present value of the sums ins. "and the rises" was at the above date	1,050,239 2 0	Present value of the members' contributions "or prems. pay- able"	1,228,460 14 0
Reserved for expenses of man. being 40 p.c. of the value of the members' contributions ...	491,384 5 7	Amount at credit of the Burial Branch	318,530 12 4
Surplus	10,543 12 9	Add int. outstanding and int. accrued but not yet due ...	5,175 14 0
	£1,552,167 0 4		£1,552,167 0 4

"The valuation therefore (says Mr. Sprague) shows a small surplus or bal. of assets over liabilities, which would have been increased if I had added to the amount of the Burial Fund the amount of arrears or prems. due by members at the end of the year. I have thought it better, however, to omit this amount, £8816 or. 9d., as it is certain that the whole of it would not be received by the So." He adds :

The existence of the above surplus, after deducting from the value of the prems the full 40 p.c. allowed for expenses, is an extremely satisfactory result; and I feel no hesitation in saying that I believe the So. is not only in a position to meet promptly all its engagements, as they mature, but that unless its progress in future should be very different from what it has been in the past, its operations will result in a gradually increasing surplus. At the present time it is evident that the surplus is not sufficiently large to justify any dealing with it; and I recommend that it be left to accumulate until it shall reach a magnitude that will enable you to take into consideration the possibility of granting some increase of benefit, to those members who shall for the longest time have belonged to the So. and shall not have received any benefit from the source next to be mentioned.

The point here referred to—and it is also referred to in the Valuation Bal. Sheet—is that of "Rises." Under No. 30 of the So.'s Rules, these attach to certain ins. effected in the year 1871, and previously. Under this scheme every ins. of £6 is increased by a rise of 10s. each year after the first, until it amounts to £10. On the 31 Dec. 1873 the total amount of such rises stood at £791,016 15s., and they were increasing at the rate of about £73,000 p.a.; "but after the year 1880, when all the ins. issued under the old scale of prem. shall have been 10 years in force, there will be no further rises. And after that date I anticipate that the surplus will rapidly increase."

The data upon which this valuation is based was drawn from the books of the So. under the superintendence of Messrs. Liversage and James Atherton. It was nearly 5 months in preparation, the average number of clerks employed on the work being 44; the total cost £1920 17s. 7d.

Mr. Sprague explains the principles upon which his valuation was based as follows : and the information will be of service to other Sos. :

The above-mentioned materials having been furnished to me, it required very little consideration to satisfy me that no annu. and assu. T. could be so suitable for determining the value of the members' benefits and contributions as those T. from which I deduced the scale of prems. now in use by you. The circumstances of your So. differ widely from those of an ordinary life ins. co. On the one hand, the rate of mort. prevailing among your members is higher than that which prevails among insured lives generally, or even among the general pop. : so that any of the ordin. Mort. T. would give an altogether incorrect view of the prob. value of your engagements. On the other hand, while it is not the practice of your So., or of any similar one, to make any allowance, by way of surrender value or return of prems., to members who voluntarily withdraw from the So. or forfeit their benefits by non-payment of the prem., it is well known that there will always be many members who, from one cause or another, will from time to time leave the So. ; and it does not seem right to leave this point out of consideration in dealing with your finances. I therefore in calculating the prems. at present charged by the So. used a Mort. T. deduced from an examination of the mort. among one section of your members, combined with int. at the rate of 4 p.c., and at the same rate made allowance on account of the continuous withdrawals among the members.

The importance of considering the effect of these withdrawals upon your finances is well shown by certain figures that have been furnished me with regard to the "reduced claims" payable during the 3 years 1871, 2, 3. Formerly when a member was more than 6 weeks in arrear in his payments, he was wholly "out of benefit" : and in case of death his representatives received only such a voluntary grant as the committee of man. thought fit to pay; but under the Rules, as altered in the year 1870, a member who is more than 6 weeks in arrear is not wholly out of benefit until a further time has elapsed, the length of which depends upon the standing of his ins. : and if he should die in the mean time, a certain proportion of his assu. is payable. . . .

It appears from these figures that in the 3 years under consideration, there was a difference of £14,049 between the full claims that would have been paid, if all the members who died had been in full benefit, and the actual amount paid, being rather more than 5 p.c. upon the full amount of the assu. becoming claims. This is in add. to any profit that may have been made by the withdrawal of other members from the So., in consequence of non-payment of their contributions.

Mr. Sprague adds : "Such then were the principles upon which I calculated your new prems. in the year 1870; and the subsequent investigations I have from time to time made of your affairs, have entirely confirmed my opinion of the safety of those principles. I have therefore no hesitation in applying them to estimate the financial position of the Burial Branch of your So., and looking at the results of this, and of previous investigations, I feel myself justified in certifying that your So. is in a thoroughly sound and satisfactory condition."

We quote this opinion so fully mainly on account of the disparaging remarks which we have too often seen regarding this So.—written, as is clear, by those who had no exact knowledge on the subject, and whose opinions, therefore, were entitled to no weight; but among the ignorant, unfortunately, unfounded aspersions sometimes carry greater

amongst the great mass of those parties whose interest is intended to be advanced by any legislative measure on this subject.

Your Committee refer to the very explicit evidence of the Chairman of the Board of Inland Revenue, and of Mr. Trevor, to show that in their opinion the loss to the public purse would be inconsiderable, if put in comparison with the national benefit which they believe would be achieved.

If Parl. should adopt this proposal, it will of course be necessary to guard the privilege from abuse, by annexing conditions to all Sos. or Assu. Cos. which may avail themselves of it; amongst which the most prominent should be, that a minute and strict return of the pecuniary conditions and accounts of each should be made, to be laid before Parl.

It may also be found that, irrespective of any pecuniary advantage, such a plan may be a means of checking the formation of delusive and ill-founded schemes for estab. Life Assu. Cos.; and this is a subject of so important and critical a nature, that although your Committee do not feel justified by the terms of their reference to enter upon it in detail, yet they think it right to press it upon the notice of the House.

Your Committee examined Mr. Pratt, Regis. of F. Sos., about the tenure of his office. He states that he is the sole depository of all the various mass of miscellaneous matter which in the last 20 years has been poured in from above 10,000 Sos.; and he suggests that a Board should be formed for the purpose of superintending the man. of F. Sos., and of affording advice and information when applied to; of furnishing correct Rules and T. at a small expense, for which they would employ eminent actuaries, or the Inst. of Act., and of requiring Sos. which are possessed of legis. privileges to act up to the rules on which they were estab.

Sir Alex. Spearman, the Comptroller-Gen. of the National Debt Office, was examined regarding the investments of F. Sos. in the Gov. Stocks; and the substance of his evidence was as follows: His office had no means of checking or verifying the amounts transmitted by any one So., beyond the statement of the So. itself [showing very inefficient book-keeping in his department!]. *The int. allowed to the Sos. was higher than the Gov. realized;* that the risk was great if the funds should go down: for the Sos. might draw out their money, and the difference between the price when sold and when invested would be so much loss to the country; that sums were seldom drawn out when once invested with the N. D. Commissioners; and it was open to surmise that the Sos. continued to pay current claims without disturbing their investments carrying high int. [a testimony of sound financial judgment]; this was to the prejudice of the public revenue. The total funds of F. Sos. invested with the Government reached £2,393,000—part at int. at the rate of £4 11s. 3d., and the remainder at £3 16s. p.c. p.a.; whereas the average rate realized during the past 12 years had been only £3 4s. 9d. p.c.; and that the total loss if the whole were sold out and paid off at the then price of funds would be £127,000! But that in the case of the *Clergy Mut.* (one of the Sos. complained of), if the accounts with them were then closed, the revenue would have gained a profit of £5900 [fit subject for reflection of Man. of that So.]. The Committee recommended these facts to the serious consideration of the House.

The last witness agreed with Mr. Pratt in the suggestion of a *Board of Control* for F. Sos., in view of a greater number of persons having cognizance of the man. of the Regis. Department; he also thought it in the interest of F. Sos. that they should be placed under greater control than they then were; and that the existing state of things as regards the regis. merely the name and rules was unsatisfactory in a public point of view.

In the opinion of your Committee, the subject of investments and the interest payable on them, requires to be maturely considered, so as on the one side to protect the revenue, and on the other to keep faith with parties who have acted under the sanction of Acts of Parl. A power is evidently wanted to obtain more full investigation of all Sos. investing through the National Debt Office, and of requiring that such investments shall be subject to reduction, in proportion to the just demands which ought to be payable from them.

All these subjects ought to be examined and settled whenever a Bill shall be brought in for rendering permanent the law relating to F. Sos., which at present has a limited duration.

It does not appear to your Committee that these 5 Sos. have been acting contrary to the Law. The Act under which they were enrolled declares in its preamble, that it is expedient to give protection and encouragement to the formation of F. Sos., and enacts that any number of persons, without distinguishing any particular class or condition, may form themselves into such a So. To Sos. so estab. that Act gave privileges of interest at £3 16s. old p.a., exemption from stamp duties, priority of payments from executors of persons dying in their debt, and exemption from probate duty to the amount of £50. . . .

Although it appears that these Sos. possess and exercise privileges and exemptions for which they can allege specific stat., passed for the encouragement and protection of F. Sos., it appears to your Committee that, as they have manifestly outgrown the particular class of objects which were in the contemplation of Parl. when these stat. were passed, and have become in fact Life Assu. Offices, they ought to be placed upon an equal footing, in respect of such exemptions, with other Assu. Cos.: either by being deprived of those privileges, or by extending them to all alike.

There are grave considerations which should make Parl. hesitate before it proceeds to adopt the former alternative. To make a provision for a wife and family out of the savings of a salary, or wages, or small income, is an object which ought unquestionably to be fostered and encouraged. This would be checked and damped if an advantage hitherto offered should now be withheld. But it is said, Confine these exemptions to Sos. which do not issue pol. above £100 or £200. If this were done, so far as these 5 Sos. complained of are concerned, they would indeed lose the privilege which they hold under the specific authority of Acts of Parl.; but they would still continue their transactions, and would be in the anomalous position of being constituted under the F. Sos. Acts, but destitute of all the benefits conferred by such Acts!

Mr. J. Tidd Pratt gave it in evidence that there had been regis. in England and Wales, under the Act of 1850, about 1920 Sos., including the Branches and Lodges of the Odd Fellows, Foresters, etc. Out of this entire number, about 28 had their T. "certified."

Mr. Pratt thought that if a Board of Control or Advice for F. Sos. were constituted, such Board should not appoint any particular Act to certify the T., "because by that it might be considered that the Board, or in other words the Gov., would be responsible

for expenses of funeral, etc. Its success has enabled this sum to be considerably increased. The Medical Fund provides medical attendance for the members and their families for ordinary illness. It appears to be a model Asso.

1852.—There was enacted the 15 & 16 Vict. c. 65—*An Act to Continue and Amend an Act passed in the 14th Year of the Reign of H. present M. to Consolidate and Amend the Laws relating to F. Sos.*—by sec. 4 of which the Act of 1850 is continued to 1 Oct. 1853, “and to end of the then next Session of Parl.” [It was afterwards continued until 1855.] It was then enacted that the Acts relating to F. Sos. passed previously to 1829 be continued in force as to the Sos. regis. under them: but all such Sos. might come under the provisions of the Act of 1850 by having their rules “certified in conformity thereto; and thereupon the provision of the Act or Acts under which such So. has been estab. shall cease as to such So., except as to any offences committed, or penalties or liabilities incurred, or bond or security given, or proceedings taken under such Acts.” (Sec. 1.)

The Registrars of F. Sos. in Eng., Scot., and Ireland to retain their salaries and expenses out of fees received (2). Trustees of F. Sos. having deposits with Commissioners of National Debt to furnish returns demanded by such Commissioners. (See 1854.)

A Select Parl. Committee was this year appointed, “to inquire into the operation of the Law relating to Friendly Sos.” This Committee consisted of Mr. T. H. Sotherton (Chairman), Mr. Adderley, Mr. Bonham Carter, Mr. George Cornewall Lewis, and other well-known members. Among the witnesses called before it were Mr. Michael Saward, Mr. James John Downes, Mr. Gilbert Laurie Findlay, Rev. John Hodgson, Mr. Benjamin Ecroyd, Mr. Richard Henry Jones, Mr. Joseph Marsh, Mr. Charles Jellicoe, Mr. Saml. Ingall, Mr. C. J. Bunyon, Mr. John Tidd Pratt, and various others. The Rep. of the Committee, which was ordered to be printed 25 June, 1852, contains (*inter alia*) the following:

Your Committee appointed to inquire into the operations of the Laws relating to F. Sos. have examined witnesses thereon, whose evidence they have agreed to report to the House.

They proceeded first to inquire into the particulars of those cases of alleged hardship or injustice which have been brought under the notice of the House during the present Session, by petitions from different parties.

1. The Act of 1850, which is the existing law regulating F. Sos., contains a proviso that it shall not be lawful for any So. estab. under this Act to assure the payment of any sum exceeding £100; nor any annu. exceeding £30 p.a.; nor a sum in sickness exceeding 20s. a week. It also prohibits *nomineeship* to others than widowers, widows, or children of members; and it reduces the *int.* payable on future deposits made with the National Debt Commissioners to £3 p.a. instead of £3 16s. 0d.

One operation of these clauses has been to oblige certain benevolent and useful Sos. at DUBLIN, CORK, and LIMERICK, and certain other Sos. estab. nearly a century ago in the NORTH OF IRELAND for providing an income for the widows of Presbyterian ministers, to suspend their transactions; because, 1st, those Sos. grant annu. to an extent exceeding the limits of this Act; and, they grant them to nominees, such as sisters and brothers, nephews and nieces, cousins and strangers in blood; 3rd, they are reluctant to reduce their benefits to suit the lower rate of *int.*

Dr. Cooke and Dr. Montgomery appeared before your Committee, and their evidence shows that their So. is the main dependence of the members of their ministry, as a provision for their widows; that it has existed nearly a century, and was recognized by the Irish Parl. 36 Geo. III.; was enrolled in 1809, under 49 Geo. III.; and that they had been formally placed within the F. Sos. Act by 2 Wm. IV. c. 37. They complain besides that the Act requires T., a bond from the treasurer; that a member may not belong to 2 Sos.; that Sos. should be forced to make returns to the Registrar; and that they should not be allowed to lay out their money in land.

The Committee admit that they see no good reason why the limitation as to the amount of the annu. on sickness may not be withdrawn in the next Bill, “if only care be taken to require that the T. for such annu., where the amount of such annu. is certain, be calculated by a competent actuary, and the contributions be kept distinct.” On the other heads of complaint the Committee thought that the case of these long-estab. Sos. was *deserving of a special Act*; and that it was not advisable to alter the general law in order to accommodate their requirements, “however unobjectionable, or praiseworthy, they may be.”

2. A petition has been presented from 83 Assu. Cos. complaining that certain 5 F. Sos., estab. under 10 Geo. IV. c. 56, before the year 1840, claim to have the power to make their pol., by a clause in the pol., payable to widow or widower, or child of a member, to any amount; and that such pol. are exempt from legacy and probate duty; that these Sos. have ceased to possess the character for which Parl. granted privileges; that they have an unfair advantage, from being constituted under the F. Sos. Act, which is equivalent to a Charter, being in reality Trading Life Assu. Cos.; and they ask to have such Sos. confined in their transactions to the limits prescribed by the Act, namely, of £100, or compelled to be reconstituted in the same manner as other Life Cos.

The 5 Life Offices here referred to were: 1. *Clergy Mut.* 2. *Friends Prov.* 3. *Prov. Clerks.* 4. *National Prov.* [called in Rep. *National Benevolent*]. 5. *United Kingdom Provident.* We believe, as a matter of fact, there were several others. (See 1854.)

Your Committee examined several witnesses in support of this view, as well as other witnesses on the part of the Sos. against whom the complaint was laid; and they refer the House to the evidence, which is of an interesting and curious nature.

It is also to be borne in mind, that the security and good man. of a So. depend in no small degree upon the amount of their transactions, and of their revenue; and it is desirable therefore to induce the poorer class to insure in Sos. in which the richer also insure; and these 5 Sos. have beyond question conducted in a very material degree to extend downwards in the scale of society a knowledge of the principle of mut. assu., and a disposition to embrace the advantage of it.

The other alternative your Committee incline to recommend to the attention of Parl., namely, to allow the privilege of exemption from stamps and probate and legacy duty, to the pol. of all Life Assu. Offices, as well as F. Sos., to the amount of £500. This amount is taken, because, whatever limit may be fixed upon, that will virtually be the limit of the provisions made for their families

and alteration of rules of 1889 F. Sos. had been regis. "Some few cases arose where a certificate was refused in consequence of the objects proposed in the rules not being in conformity with law." A new object had been approved by the Sec. of State (under authority of Act of 1855), viz. for "Relief of the members in case of shipwreck, or loss or damage to boats and nets."

At the close of 1857 the Registrar had sent out the forms of Ann. Returns required to be filled up and transmitted to him under the 45th sec. of the Act of 1855, and he remarks thereon:

In consequence of the facilities afforded by having a complete regis. of all the F. Sos. estab. according to law since the year 1793, the Registrar was enabled by the end of Dec. 1857 to send by post 22,500 forms of Ann. Returns. . . . It must not, however, be supposed that that number represents the number of Sos. in existence, as it only shows the number of Sos. in the regis., of which no account could heretofore be given, except that they had been enrolled or certified. A large number of Returns (about 2000) were received by post, with various notices written on the envelopes, stating that the So. was dissolved, or had removed, etc. The notices were entered in the regis., and thus far it has been cleared of many useless entries; but the required information is not yet complete, as in many cases there is little doubt that although the So. is dissolved or removed, the return paper was retained, and no information forwarded. Every year, however, will, by the adoption of this practice, render the regis. more accurate as regards the existing Sos.

By the end of March, 1858, no less than 5940 Returns of the condition of the respective Sos. during the preceding year had been received, and Returns have since been coming in daily, up to the time of going to press. This number, therefore, is as fallacious as the number of Returns sent out, mentioned above, as showing the number of Sos. in existence—as it must be borne in mind that the sending a Return is a voluntary act, and its omission is attended with no penalty or disability; and when it is considered that the great majority of the secs. of these Sos. are working men, with merely the rudiments of education: and the filling up of a "form" however simple is no light matter with them, the number sent up to the end of March is as large as could be expected. There is little doubt, however, that in future years the number of Returns received will be increased to one more commensurate with the number of F. Sos.

As the Returns were received they were examined with reference to the items of expenditure, "and it was found that a constantly recurring item was for drinking and feasting." The Registrar sent a letter drawing attention to the objectionable items in each case, and stating that such expenditure was not in conformity with the Acts now in force. "About 500 of these letters were forwarded to the respective Sos., and from the replies received it appears that in most instances a meeting of the members was called, and after the subject had been discussed, the necessary reforms were made. The tenor of the letters received by the Regis. with reference thereto show that the majority of the members were thankful for having had their attention called to the subject."—p. 5.

Another point to which attention was drawn in the examination of the Returns was the *Investment of the Funds*. It was found that a large amount of money was invested in the hands of the Sos. treasurers, of Private Bankers, of Brewers and Manufacturers, on notes of hand; in Building Sos., in Loan Sos., and in various other similar investments. "The extent to which these investments are made is much greater than might have been expected. In the pub. accounts of an estate, where the partners carried on bus. as Bankers, Tanners, Shoe Manufacturers, and Brewers, and which was in the Bankruptcy Court during the present year, it was stated that the unsecured creditors included the following F. Sos." Then a list of 36 Sos. is given, mostly in the neighbourhood of *Kettering* (Northamptonshire). The Registrar adds: "At the meeting of the creditors of a large firm of brewers [Messrs. Calverts?], which also took place during the present year, it was stated that no less than 44 Sos. had their funds invested with this firm; and the same has happened with several late bankruptcies. In these and similar instances F. Sos. take their share with the general creditors, and have not the preference they would have had if the investments had been in accordance with the Act." The Registrar accordingly drew the attention of some 700 Sos. to this fact, and much good must have resulted.

Another point upon which the Registrar sought information was the length of time which the Sos. had been in operation, i.e. their individual age; and he remarks hereon: "As this point is so easy to determine, it is strange that only 3073 Sos. responded to the request, and gave the information required." Of these, 20 were stated to have been in existence over a century; 23 over 90 years, 20 over 80, 41 over 70, 46 over 60, 100 over 50, 129 over 40, 301 over 30, 721 over 20, 1187 over 10, and 485 under 10. The Registrar says hereon:

If the same proportions hold good for those Sos. which have not given any information on this point, it follows that more than 10 p.c. of the F. Sos. have been estab. about 40 years; and as in my last Rep. (p. 14) it was shown that about 32 years is, in general, a sufficient length of time for a So. to arrive at its maximum liability, it would seem that about 10 p.c. of the existing Sos. are in a condition of having passed safely this maximum point, and to be now firmly estab., with the results of their own experience as a test for the future.

Against this reasoning it may be sufficient to quote the case of the *Essex Provident So.* (1818), and some others which have been kept in existence almost solely by the aid of the contributions of the younger members.

The Rep. proceeds to give some valuable details regarding the *Burial Sos.* of E. & W. These we shall speak of under date 1874.

After eliminating from the returns all those exclusively relating to Burial Sos., Annuity, Endowment, and Provident Sos., there still remained 4759 F. Sos. proper regarding which many details of interest are furnished. It appeared that on an average these Sos. consisted of about 100 ordinary members, and about 1½ hon. members to each So. They

for the accuracy of those T.; and if there was a failure, either from mismanagement or any other cause, there might be some claim by that So. upon the Gov. (1321).

The number of F. Sos. having deposit accounts with the Commissioners of the National Debt direct was only between 500 and 600 (1399); but the total having deposits with Savings Banks were between 700 and 800 (1463). It appeared from the evidence, although it was not directly so stated, that a So. so depositing might, by watching the fluctuations in the funds, and regulating its deposits and withdrawals accordingly, secure a profit by the operation. (*Vide* evidence of Sir A. Spearman.)

Mr. Charles Jellicoe intimated to the Committee that the Highland So. of Scot., finding that its T. (pub. 1824) were not to be depended upon, had withdrawn them, and given notice to that effect; and had requested the Inst. of Act. to look into the matter with a view to supply other T., "or to suggest such other means of regulating the Sos. as may be best calculated for their welfare." He made a very practical suggestion as to the law of F. Sos., viz.: "that in any future Act relating to F. Sos., instead of reference being made to previous Acts, *all the previous Acts might be repealed*, and that the new Act should recite that Sos. formed between the years so and so, should have such and such privileges—mentioning the privileges—and that other Sos., estab. in succeeding periods, should have such and such privileges—again mentioning them—so that the great obscurity occasioned by the Act of Parl. repealing Acts which repeal part of other Acts, might be in some degree avoided."

This year there was presented to Parl. and ordered to be printed: *Abstract of Returns respecting F. Sos. in E. and W. during the 5 Years ending 31 Dec. 1850*. These had been obtained, in reply to, and upon forms sent out by the Regis. of F. Sos. pursuant to the requirements of the Acts of 1829, 1840, and 1846. In the introduction to this important document, it is set forth:

The returns received have been carefully abstracted, under the direction of the Regis. of F. Sos. in Eng.

Those classed as "perfect returns" contain the information which renders them useful in making a comparison with existing data for the formation of T. of contributions and allowances in cases of sickness, etc. The "imperfect returns" are such as could not be used for such purposes in consequence of some important information being omitted; but an account of them has been inserted to show the number of members in the respective Sos., the amount of funds, etc.

The actual amount of sickness experienced by the members of any So. cannot be ascertained, but only the length of time during which sick pay has been claimed. To ascertain the true amount of sickness, a deduction should be made for cases of imposition by feigning sickness; an add. for those who do not claim sick pay, although entitled to do so; and another add. on account of some forms of sickness for which no pay is allowed. A rule (which is very common) that a member in arrears for a certain time shall be suspended from being entitled to pay, although he may be ill, is another cause preventing the actual amount of sickness from being known. It appears therefore that the ratio of sickness in F. Sos., being of such a peculiar character, can only be ascertained from returns of their own experience.

The term "sickness" has one common meaning in all F. Sos.; but "superannuation" has a widely different signification in some Sos. to what it has in others. Superannuation pay is allowed in some only on account of total incapacity from work arising from age; in others, a member, although young, may be superannuated after being on the sick list for a lengthened period; and in others superannuation pay is allowed to each member who survives a certain age. Under these circumstances no account has been taken in the "Abstract" of the superannuated members, except that they are included in the "total number of members at the end of 1850."

With respect to the Report of the "Assets" and "Liabilities," it has been found that in some Sos. a portion of the funds has been invested in various securities unauthorized by the Acts of Parl. relating to F. Sos., and contrary thereto—among which may be mentioned investments at int. in the hands of Brewing, Banking, and other mercantile firms, in Shares in Building Sos., in Turnpike Trust Securities, in the Scrip of various Public Cos., etc. As it was not deemed advisable to provide a separate col. in the Abstract for the purpose of entering "illegal investments" where they have occurred, they have been included in the first col. relating to the funds headed "Funds invested on Real or Heritable Securities, or Heritable Property, etc."; and they are included in the col. of "Total Funds."

The returns have been arranged in counties. A reference has been made to such Sos. as have had their T. certified by an actuary, whether the So. is composed of males, females, or of both, etc.

Finally, it is stated that it was almost impossible to ascertain the number of F. Sos. which were then in existence. There was no authentic account of the Sos. enrolled under the Act of 1793, and the other Acts previous to 1828. The following T. shows the numbers regis. between 1828 and 1847. [See T. on page 472.]

Here then we have evidence of 10,433 F. Sos. in E. and W. [it is a great pity that returns could not be obtained for Scotland and Ireland at the same time], of which 9497 were in England and 936 in Wales. Of the Eng. Sos. 3934 had sent in returns; of the Welsh Sos. 357. The aggregate number of members in the Eng. Sos. was 740,581; in the Welsh Sos. 41,141; total, 781,222. The contributions received from members during the year ending July, 1847, was in Eng., £662,082; in Wales, £31,669; total, £693,751. The amount disbursed to members, during the same period, was in Eng., £491,462; in Wales, £27,516; total, £518,978.

But it is further pointed out that there were a very large number of F. Sos. having a great number of members, and a considerable income, that were not enrolled, and concerning which therefore no detailed information could be obtained. Then, again, from 8 July, 1847, to 23 Nov. 1852, the number of F. Sos. whose rules had been enrolled was about 5520—this brought up the total number of enrolled F. Sos. to about 16,000. There had, however, prob. been some duplicate enrolments. The returns had been brought up to 31 Dec. 1850.

Friendly Societies in England and Wales, Enrolled between 1828 and 1847.

Counties.	No. of Societies.	No. of Returns received.	No. of Members on 8 July, 1847.	Amount of Money received from Members during year ending 8 July, 1847.	Amount of Money paid to or on account of Members during the same period.
<i>England.</i>					
Bedfordshire	155	71	5,578	£ 4,492	£ 3,964
Berkshire	118	57	4,035	3,703	2,548
Buckinghamshire	138	65	6,076	5,202	3,770
Cambridgeshire	125	55	3,461	4,305	3,220
Cheshire	254	118	17,800	13,719	12,305
Cornwall	167	95	12,395	9,443	8,328
Cumberland	30	16	2,120	1,506	1,308
Derbyshire	128	59	5,734	4,317	4,095
Devonshire	362	193	29,768	34,457	29,521
Dorsetshire	126	63	6,810	5,348	4,192
Durham	217	58	6,627	5,523	4,870
Essex	274	98	16,459	18,229	15,172
Gloucestershire	236	103	11,210	14,227	10,732
Hampshire	301	149	24,760	20,921	19,302
Herefordshire	45	18	821	686	992
Hertfordshire	94	46	5,289	6,054	4,917
Huntingdonshire	65	41	2,429	2,175	1,904
Kent	313	190	29,810	27,857	24,304
Lancashire	620	293	258,095	71,200	66,869
Leicestershire	137	75	5,606	4,552	4,563
Lincolnshire	111	67	5,814	5,620	5,386
London }	268	65	22,297	132,745	54,076
Middlesex }	1301	317	43,380	62,421	44,632
Monmouthshire	356	106	10,341	11,699	10,797
Norfolk	262	121	7,644	6,793	7,358
Northamptonshire	218	118	8,209	6,914	5,694
Northumberland	213	56	6,666	6,835	6,371
Nottinghamshire	59	34	2,734	4,359	3,371
Oxfordshire	111	55	3,468	3,335	1,965
Rutlandshire	11	7	624	476	388
Shropshire	198	90	12,639	8,167	7,321
Somersetshire	218	96	10,400	7,535	5,802
Staffordshire	445	201	27,639	25,291	20,578
Suffolk	205	110	9,994	27,313	20,929
Surrey	324	114	15,475	16,175	14,975
Sussex	90	49	5,891	4,886	3,664
Warwickshire	336	130	16,381	12,054	8,513
Westmorland	3	3	232	195	226
Wiltshire	135	53	7,358	3,704	2,500
Worcestershire	214	86	5,437	5,175	3,963
Yorkshire	454	193	63,315	52,374	37,077
Total	9497	3934	740,581	662,082	491,462
<i>Wales.</i>					
Anglesea	34	14	1,808	1,217	899
Breconshire	147	48	4,907	5,079	3,838
Cardiganshire	76	26	2,565	1,414	1,029
Cardiganshire	76	28	2,031	1,485	1,275
Carmarvonshire	46	23	3,595	2,479	2,033
Denbighshire	91	51	8,245	6,442	6,497
Flintshire	33	23	3,382	2,255	2,045
Glamorganshire	248	95	9,097	7,141	6,231
Merionethshire	48	19	2,165	1,216	931
Montgomeryshire	57	—	—	—	—
Pembrokeshire	69	26	2,891	2,618	2,393
Radnorshire	11	4	455	323	345
Total	936	357	41,141	31,669	27,516
Total of Eng. & Wales	10,433	4291	781,722	693,751	518,978

Mr. J. Tidd Pratt said before the Select Parl. Committee of this year, in respect to these returns :

674. . . . From the returns I have now in my possession, from nearly 3000 Sos., containing the date of the estab. of each, the ages between which each member is admitted, his trade and occupation ; much valuable information may be obtained. These returns have been arranged according to the different counties in E. and W. ; and an abstract of them is now preparing under my direction : and the number of days of sickness in each year during the last 5 years, and the number of deaths, is preparing to be laid before the House of Commons ; and I would suggest that the whole of these returns should be laid before the Inst. of Act., who I have no doubt will be able to direct the formation of such a set of T. as would have the effect of satisfying the minds of parties forming these Sos., with reference to the great difference there is now existing between the T. of different actuaries.

He afterwards (Q. 1254) stated that these returns related to about 300,000 individuals—referring to the correct returns.

A correspondence took place between the Registrar of F. Sos. and the Inst. of Act. regarding these returns. The Reg. in July of this year announced his possession of the data, and asked the Inst. "whether there was a necessity at that time for further data on the subject of sickness and mort., especially with reference to the members of F. Sos. ; and if so, whether the 40 vols. of information [of which one was sent as a sample] could be used beneficially for such an object as providing more data or not," with a view to such opinion being laid before the Lords of the Treasury. It was inquired whether the Council would consent to superintend the preparation of such data, and the subsequent compilation of T. The gen. opinion of the Council on the subject was also requested. The reply was in substance as follows :

The Council, admitting that some very valuable information had already been collected on the subject, thought that the favourable opportunity now presented of classifying the large body of more recent facts returned to the Gov. order should not be lost ; and taking it for granted that there existed, as represented, perfect returns of sickness and mort. experienced among 300,000 members for the last 5 years, the Council of the Inst. would undertake the public trust of analyzing these returns, and of forming from them a set of T. of money values for rates of allowance in sickness, and for payment of given sums at death. If however it should hereafter appear that the use of the T. ought to be modified by the nature of the individual So., its particular locality, and special regulations, the Council would propose to append to the T. such obs. as would guard the public against their indiscriminate or injudicious application.

This correspondence was submitted to the Lords of the Treasury, who appeared to think that, "in a matter of this kind, it would upon the whole be better that the work should be undertaken by that department of the Gov. which is more immediately in connexion with F. Sos., and on the establishment of which department there is employed an officer specially conversant with such matters." The data was accordingly handed over to Mr. A. G. Finlaison for treatment ; and his Reports thereon will be spoken of under date 1853 and 1854.

Mr. H. Tompkins read before the Inst. of Act. this year a paper : *Remarks upon the Present State of Information Relating to the Laws of Sickness and Mort., as Exemplified in the T. of Contributions, etc., used by F. Sos. ; and the same is pub. in Assu. Mag. vol. iii. p. 7.* The author says : "One of the most important problems of social statistics, after the questions of food and labour, is to determine the ratio of sickness ;" and he then passes under review the various attempts which had been made in this direction.

The author expressed his belief that the "rate of mortality and the rate of sickness, generally speaking, are fixed rates," which drew from the Editors of the *Assu. Mag.* the following obs. :

There is reason to believe that these rates differ in every association, not widely perhaps, but characteristically. Independently of the locality of a So. and occupation of the individuals forming one, the mode of admitting members, and the grounds of exclusion ; the quantum of medical investigation ; the rules by which persons are admitted on the sick list or taken from it ; the position and character of the members who have the management ; and many other similar influences make themselves felt, and give a particular character to each. Even the average rates of sickness and mort. throughout the country cannot be considered as ever "fixed." No doubt they may remain invariable for years ; but time may still produce changes, as we have reason to believe it has done already. Such being the case, there is of course great room for difference of opinion as to the rates which should be selected in any particular instance ; and it is quite possible that good reasons might be found for the discrepancies which Mr. Tompkins points out, and that dissimilarities exist, either in the circumstances or in the constitution of these Sos., which would naturally escape the observation of all but an experienced actuary. It is, however, undoubtedly true, that great inconvenience is felt from the want of sufficient data, especially as regards sickness—what has been collected on that head being, as Mr. Tompkins justly states, notoriously imperfect and insufficient ; and therefore it is undeniable that the making the valuable data collected with so much labour by Mr. Tidd Pratt accessible would be a great boon to the whole community.

As regards the general question, it is time that some steps were taken to place the F. Sos. of this country on a better footing ; for notwithstanding the laudable efforts made by the Government for years past, and the strenuous exertions of Mr. Sotherton, Mr. Bonham Carter, and other members of the Legislature, to bring about such changes in the law as might be calculated to improve their condition, nothing can, on the whole, be more unsatisfactory. *For our own part we are disposed to think that it would be wiser to discourage them, and to strive to induce the classes more immediately concerned with them to follow the example of their perhaps more intelligent fellows in the next and superior grades of life, who prefer to resort for similar objects to independent asso., established for the purpose of meeting their wants in this respect.* It is much to be feared that the good effected by F. Sos. bears no proportion to the loss and disappointment which their failure so frequently entails ; and it is to be doubted whether there can ever be that constancy and stability in the management of them which is essential to carry out and bring to completion contracts, which from their nature must be of many years duration. If asso. of this kind be indispensable to the classes from which F. Sos. are constituted, it would be well to base them on the most simple principles, leaving more

serious engagements to be dealt with by more stable bodies. An ann. subs., to be expended upon the sickness of the year, or to be divided amongst the survivors at the end of it, might be to a certain extent beneficial, and might serve for the cultivation of a friendly understanding, and for the promotion of mutual good offices; whilst any loss of moment, or disappointment of consequence, would be out of the question.

The was pub. this year : 1. *Suggestions to the Promoters and Members of F. Sos.* This was an official pub. 2. By the Rev. W. Lea : *A Catechism on Clubs—which to join; which to avoid.* 2nd ed. 3. Mr. Charles Hardwick pub. a pamph. : *F. Sos. ; their Progress, Prospects, and Utility.*

There was also pub. by Mr. Alex. Robertson : *Periodical Savings Applied to Provident Purposes: with Remarks on the Construction and Practice of Friendly, Odd Fellows, Building Freehold Land, Loan Sos., and Savings Banks, and suggesting a Plan of Self-Protecting Life Assu.*, wherein he very tersely remarks : "F. Sos., variously regulated, and instituted for different benevolent objects, are of very ancient date, and seem to have been appendages to almost all asso. originated for personal protection, the management of general interests, or for religious or social purposes. The Incomp. Cos. and Trades, Mason Lodges, and some of the Religious Orders, had their Friendly Sos. or Boxes, as they were sometimes called." (p. 10.)

Same year the Rev. J. B. Owen pub. his lecture on *Popular Investments*, wherein he deals with F. Sos.

The *Counties Union* Life, etc., founded this year, proposed as one of the branches of its bus., "the securing Benefit Sos. against ultimate failure"—meaning F. Sos. The prosp. said :

In consequence of the want of adequate scientific arrangements at the time of their estab., Benefit Sos. have been very generally founded on an insecure basis; to this in many cases has been added a great amount of mismanagement; and as the consequence, great numbers of them are approaching to a crisis which will be ruinous to the members who are relying on them for support. The *Counties Union* is open to applications from all Sos. of this description for the purpose of indicating the means by which their affairs may be relieved from embarrassment, and affording them the assistance requisite to meet the claims of their members, subject to such modifications as the present state of their affairs may render necessary.

The remedy in this case would prob. have been much worse than the disease.

Belgium.—There was this year pub. in Brussels : *Institutions de Bienfaisance de la Belgique*, from which, and from other sources, we propose to draw some information regarding the position of F. Sos. in *Belgium* at this date.

"Mutual Aid Sos." are especially instituted to assist sick working men. One kind confines itself to giving relief in money; another kind, smaller in number, adds to this medical assistance and medicine. Some also pay the funeral expenses, and give pecuniary relief to the family in case of death. *The orig. of many of these Sos. is very ancient*; others have only existed a few years. Some are instituted by the working classes themselves; others by their employers. Their organization is of infinite variety.

In a Rep. of 21 Jan. 1851, made by Mons. T. Kint de Naeyer on the proposed law of Mut. Aid Sos. in the session of the Chamber of Representatives is a detailed list of the Sos. of this class then existing in *Belgium*. This list contained the name of each So., its date of foundation, place of meeting, occupation of the members, number of part. members, rates of contribution, nature of benefit afforded, amount of funds, etc. From it there appeared to be a total of 211 Sos., located in 35 towns and districts, and having 24,367 members. Several important localities, and two entire provinces, viz. Limbourg and Luxembourg, had no inst. of this kind.

The Sos. were at this date regulated by a law dated 3rd April, 1851. This law authorized the Gov. to recognize Mut. Aid Sos., of which the object was to assure temporary succour, either to the members in case of sickness, wounds or infirmities, or to the widows or families of deceased members; to provide for funeral expenses; to facilitate the accumulation of the members' savings for the purchase of necessities, provisions, or for other temporary necessities.

The recognized Sos. for Mut. Aid enjoy the following advantages :

1. The power to sue and be sued; but when the affair exceeds the jurisdiction of the Judge de Paix (Justice of the Peace), they cannot plead without the authority of the permanent deputation of the Provincial Council, except they have recourse to the King, in case the authorization is refused. They can obtain exemption from the costs of procedure on conforming to the arrête royal (art. 6).

2. Exemption from stamp duties and registration fees of all deeds made in the name of the Sos. or in their favour. All certificates, notices of authorization or revocation, and others, which are required to be produced by the members, shall be delivered gratis, and exempt from such fees and duties.

3. Power to receive donations or legacies of personal property by attending to the formalities prescribed by No. 3 of art. 76 of the Communal Law.

It was hoped that by means of this law the organization of the F. Sos. of *Belgium* might be placed upon a more solid, uniform, and extended foundation. It was also intended to encourage co-operative asso.

It appears that there exist in *Belgium* a number of *Provident Funds*, or superior F. Sos., instituted in favour of sick, wounded, infirm, and disabled workmen, their wives

and children. These embrace in their operations a variety of modes of assistance, which essentially distinguish them from the Mutual Aid Soss. These are usually promoted among persons engaged in special occupations or industries, or whose labour exposes them to especial dangers. Of these there are several kinds, of which we shall speak in their order.

1. *Provident Soss. for Miners.*—There were 6 of these Soss. in existence; the first dating back to 1839; 3 were formed in 1840; and 2 in 1841. These provide pensions for life, and also temporary pensions. The *pensions for life* are allotted, 1st, to workmen rendered incapable of work by reason of wounds received, or by accidents happening, while they were at work, either within or without the mine; 2nd, to widows of workmen who had perished by accident in a mine; 3rd, to the father and mother, grandfather or grandmother, of workmen who had perished by accident in a mine, when, not being able to provide for themselves, they had no support but the deceased. The *temporary pensions* are accorded, 1st, to the infant children of a widow whose husband has perished by accident while working in a mine; 2nd, to the orphan without father or mother, whose father or mother, the last survivor, has perished by accident in a mine, when they are in need and the deceased was their principal support. The pensions referred to in these cases cease as soon as the children attain the age of 12 years, except in case of sickness, or infirmity duly proved by the certificate of the doctor.

The funds are made up from the following sources—1. Deduction from the wages of the miner. 2. The aid given by the proprietors of the mines. 3. The allowances granted by the Province and the Gov. 4. Int. on capital and extraordinary receipts. 5. Gifts, legacies, etc.

The deduction made from the miners' wages for the fund at *Hainault*, fixed orig. at $\frac{1}{4}$ p.c., had been raised to $\frac{3}{4}$ p.c.; and that for *Namur* to 1 p.c. The aid given by the proprietors of the mines is equal to the deduction made on the miners' wages. In the fund of *Hainault* and *Luxembourg* there existed a reserved fund, produced by a deduction of 10 p.c. on their receipts, in order to provide for expenses which might be occasioned by extraordinary accidents. A part of this fund might be applied to ameliorate the moral condition of the workmen, and to propagate instruction among their children. Lastly, the rules prescribe the formation, in each mine of the *Asso.*, of a fund of their own, destined to relieve the wants of the sick or wounded miner.

The organization of these funds is made to correspond with the object of their creation, as far as may be. The assistance is voluntary on the part of the proprietors; the participation of the miner is assured in each mine by the rules of the estab. *The Gov. overlooks the whole, and encourages adhesions to the Asso. by the grant of subsidies proportioned to the importance and wants of each fund.*

The sum total of the receipts of the district funds, and of the separate funds, amounted in 1850 to £29,223. The sum total expended was £26,666, in which was included a sum of £442, appropriated to the instruction of the children of miners. On 1st Jan. 1851, they possessed reserves amounting to £41,583. The fixed liabilities by way of pensions, etc., were £8358.

The number of workmen employed in the mines and the wages received is shown as follows:

1847	workmen employed	48,000	wages received	£1,050,216
1848	"	43,400	"	791,684
1849	"	45,100	"	740,857
1850	"	47,319	"	864,904

These were employed in 305 mines.

In 1847 the contributions from the miners was 65 p.c. of the whole fund; from the proprietors 25; from Gov. and other resources 10 p.c. In 1850 the respective proportions were 59, 27, and 14 p.c. The average payments by each workman were, in 1847, 9s.; in 1850, 7s. 8d.; by the proprietors in the same years 3s. 2d. and 3s. 4d.

The principal promoter of these Mining Funds was M. Visschers, member of the Council of Mines, whose writings upon *Provident Asso.* are widely known. And notwithstanding some admitted imperfections, the system has been of great value to the classes for whose benefit they were introduced.

The general resemblance of the *Northumberland and Durham Miners Asso.*, 1862, to these *Asso.*, will not escape notice.

2. *Provident Soss. for Workmen employed on the State Railways.*—By Royal Ordinance of 1st Sept. 1838, a fund was estab. in favour of the workmen employed on the State Railways. This fund afforded temporary succour to workmen rendered for a time incapable of working, as well as to their widows and children not capable of providing for themselves; but it did not admit the principle of a pension, or permanent succour, tending to ameliorate the condition of workmen who, by reason of infirmity, sickness or wounds, became thenceforth continuously incapable of working.

The revenues of the fund were orig. built up by a deduction of 1 p.c. on the wages of all the workmen employed on these railways. Under the regulations of 1 July, 1845, supplemented by those of 14 Aug. and 11 Sept. 1846, the deduction is 2 p.c.; and a reserved fund has been raised to provide against unforeseen and extraordinary demands. The fund is administered gratuitously by a Committee of 10 members, chosen from among the officers and workmen of railways.

The assistance given to the sick varies from one-half to three-fourths of their wages. But in case of incapacity arising from injuries resulting directly in the service, it is sometimes equal to the whole wages; but these are only in extraordinary circumstances. In 1848 the Committee adopted the following graduated plan:

1st Class.—Light sickness or wounds:

50 p.c.	of wages	to unmarried workmen; or married without children.
55 "	"	workmen married, with 1 child.
60 "	"	" " 2 children.
65 "	"	" " 3 "
70 "	"	" " 4 "
75 "	"	" " 5 and more.

2nd Class.—Serious wounds or sickness treated at the hospital.

The preceding allowances are augmented 10 p.c.; but children over 13 do not count. The father or mother of workmen, incapable of work, whether by age or infirmity, count as a child. Children over 13 are counted if by reason of infirmity they are a permanent charge on the parents.

When the wounds or sickness are of a grave character, the patients are, as often as possible, placed at the expense of the Fund in the civil hospitals of their locality. Their treatment is also confided to doctors, under special arrangement with the Committee. Again, chests, with all proper appliances, are placed at central depôts on the railways.

Independent of the temporary assistance afforded in case of sickness or wounds, the Fund allows pensions of 6s. 8d., 10s., and 12s. p. month to the widows and orphans of deceased workmen, who have contributed more than 5 years to the Fund. It also allows an ann. pension of which the average is 15s. per month to workmen who have paid from 5 to 8 years to the fund, and are removed from the service on account of old age or infirmities.

The account of the operations of the Fund pub. in 1849 furnishes some very interesting statistical details. The number of individuals contributing to the Fund was 4313—of whom 3071 were married men; 1114 were bachelors; 117 were widowers, and 12 were women. Their families were composed of 3071 women and 12,524 children—grand total, 16,838. The periods of their service were classed. The average wages of those employed was nearly 1s. 8d. p. day's work.

During the period from July 1845 to 31 Dec. 1848, there were 2438 cases of sickness, causing 142 deaths; the number of days of incapacity to work was 53,070, during which the workmen received on an average assistance equal to nearly 1s. 8d. p. day—this sum including the medical expenses. During the same period the number of wounded was 789, out of which 19 died. The wounds occasioned 17,561 days of incapacity to work, and the average assistance allowed to the wounded workman was 1s. 10½d. p. day,—this sum including the medical and surgical expenses; 778 of these accidents happened during worktime, viz. 132 on Mondays, 115 on Tuesdays, 114 on Wednesdays, 112 on Thursdays, 116 on Fridays, and 109 on Saturdays, and 80 on Sundays. Mondays, therefore, were the unlucky days. This has been observed in other employments. Friday is the next—and the character of "unlucky Fridays" does not apply.

Finally, the assistance afforded during 3½ years amounted in the whole to the sum of £7396, divided among 2435 sick workmen, 783 wounded ditto, 169 widows of workmen dying from disease or sickness, 14 widows of workmen dying from wounds, 10 orphans, and 91 workmen pensioned on account of incapacity to work, arising from infirmity or old age.

The resemblance of this Fund in its objects to several of the *Railway F. Sos.* in this country will not escape obs.

3. *Provident Funds for Fishermen and Pilots.*—The Pilots' Provident Fund, estab. and organized by virtue of the Royal Warrants of 30 June, 1839, and 10 Dec. 1844 is sustained by a deduction of 2 p.c. on the pilot dues paid by the ships which have a pilot on board. The daily business of the Fund is confined to a cashier, under the direction of the Director-Gen. of Marine. There appear to be separate funds for the pilots and fishermen of the several ports of Ostend, Blankenberghe, Heyst, and Adinkerke. The transactions only extend to a few hundreds of pounds each year.

4. *Provident Fund for Sailors under the Belgian Flag.*—This Fund was estab. at *Antwerp* by Royal Warrant 19 Sept. 1845, and has for its objects—1. To provide assistance either temporary or permanent to sailors navigating under the Belgian Flag, and who are rendered for a time, or continuously, incapable of exercising their calling; and also to those who are without resources, after shipwreck, or by reason of unforeseen events. 2. In case of the decease of the sailors, to grant assistance to the widows and families. All captains, second captains, lieutenants, sub-officers, sailors, stokers, apprentices, and midshipmen, with the exception of sailors engaged in any other fishing than the whale fishery, sailing under the Belgian Flag, and regis. on the books of a Belgian ship, participate in the advantages of this Fund. And the same is also for the benefit of their widows and orphans.

The funds and revenue are raised—1. By a deduction of 3 p.c. from the wages of the captains, second captains, and first-class artificers, when they are above £28 p.a. 2. By

a deduction of 2 p.c. from the wages of all other sailors. 3. By a payment made by the owner of every Belgian ship equal to 1 p.c. on the total wages of all the sailors in the ship. 4. By gifts and legacies. 5. By grants and subsidies from the Gov. 6. By the amount of fines inflicted for breaches of discipline by the sailors. 7. By interest of the reserved funds. The funds are invested in Gov. Stocks: and the reserves are built up by setting aside one-tenth of all the receipts, and by half the disposable surplus at the close of each year. The funds can only be drawn upon in two contingencies: 1. Extraordinary accidents. 2. For expenses of general advantage.

The administration of the Fund is confided to a Committee consisting of 10 members, with the Director-Gen. of Marine as President. There are about 1500 members. In 1850 the income was £1866.

In Portsmouth and Devonport there exist Prov. Asso. of a not dissimilar character, but supported entirely by the contributions of the members.

5. *Provident Funds attached to Manufactories.*—Independent of the preceding, nearly all of which have been instituted with the concurrence and under the patronage of the Gov., there exist in Belgium in several factories and industrial workshops, inst. of a similar nature, originated in many instances by the prudent forethought of the employers. In the Rep. of a Commission deputed in 1843 to make inquiry into the condition of the working classes, mention is made of several of these inst. [vol. i. p. 22]. They are after the type and manner of various Sos, limited to the working hands of particular estab. in this country. (See 1859.)

1853.—There was enacted 16 & 17 Vict. c. 123—*An Act to Amend the Laws relating to Investments of F. Sos.* The first sec. enacts that any F. So. duly estab. under any Act of Parl., and which is empowered by its rules to insure to or on the death of any person a sum exceeding £200, or to grant an annu. on any life exceeding £30 p.a., may invest its funds, after the passing of this Act, not only in the manner and upon the securities mentioned in the Act of 1850, but also upon the security of any rates, tolls, duties, assessments, bonds, debentures, or other securities of any body or Co. incorp. by Act of Parl. or Charter, which such body or Co. is authorized by such Act or Charter to raise, levy or mortgage, or on the security of any pol. or policies of ins. effected upon a life or lives of adequate value. But Sos. invested under the powers of this Act not to invest with Commissioners of National Debt (2); and no Sos. not having already an account with the Commissioners of National Debt were to open one after this Act (3).

There was also enacted this year the 16 & 17 Vict. c. 133—*An Act to suspend the making of Lists, and the Ballots and Enrolments for the Militia of the U.K.; and to amend the Law in relation to the Militia in Eng.*—which has a bearing upon F. Sos. as follows:

No man by reason of his enrolment or service in the Militia, or in the Naval Coast Volunteers, shall lose or forfeit, or be deemed to have lost or forfeited, any interest he may possess or may have possessed at the time of his being so enrolled or serving, in any F. or Benefit So., any laws, rules, or regulations of such So. to the contrary notwithstanding; and in case any dispute shall arise between any such So. and any such man by reason of such enrolment or service, it shall be considered as being a dispute directed by the rules of such So. to be decided by Justices of the Peace, pursuant to the provisions of the Acts in force relating to F. Sos.

By the *Income Tax Act* of this year—16 & 17 Vict. c. 34 (sec. 49)—F. Sos. legally estab. were entitled to exemption alike under Schedules C. and D. (See 1855.)

A Select Parl. Committee sat this year, "to take into consideration the subject of Ins. Asso.;" and among the witnesses examined were many of the leading actuaries of the day, including the late Gov. Actuary, Mr. John Finlaison. Mr. J. Tidd Pratt also gave evidence. In the various Parl. Committees which had sat upon F. Sos. much information bearing upon questions of life ins. had been elicited: so here the question of F. Sos. from time to time came under consideration. Thus see the following from the evidence of Mr. Pratt:

498. Do you consider F. Sos. which make an assu. for a sum payable upon death to be in the nature of assu. asso.?—No doubt of it.

499. But under a particular law, in consideration of their being applicable to the poorer classes of society?—Yes.

500. Do not you in fact consider F. Sos. to be assu. asso. intended for the benefit of those who are not wealthy enough to assure for themselves in the larger cos.?—Certainly. . . .

510. As far as they apply themselves to life assu., in what way do you distinguish F. Sos. from mutual assu. asso.?—In no way whatever except as to the amount which they can insure.

The Rep. of this Committee did not in any way deal with the question of F. Sos.

There was presented to Parl. this year (near the close of the Session): *Rep. and T. prepared under the Direction of the Lords of the Treasury, by the Actuary of the National Debt Office, on the subject of Sickness and Mort. among the Members of F. Sos., as shown in the Quinquennial Returns to the 31 Dec. 1850, received by the Registrar of F. Sos. in Eng. under the Provisions of the Act 9 & 10 Vict. c. 27.* The circumstances attending the collection and preparation of these returns have been fully stated under date 1852. The mode of treatment of the data by the Gov. Act. (Mr. A. G. Finlaison) will be set out in detail under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.

Dr. Farr, in his *Letter to the Reg.-Gen.*, appended to the 12th Rep. of that Department, pub. this year, propounds a scheme of Life Ins., *Health Ins.*, and Annu. for the working classes, and therein says:

It is undoubtedly possible to make the relief in destitution and distress under the poor law bear some proportion to the ratepayer's previous contributions, and thus put the whole population of the country on the footing of a great F. So., in which the higher and middle classes and the better class of artisans and work-people are hon. members; but in the hour they fall from affluence are entitled—without any humiliation—as benefiting members, to pay on a scale in some degree commensurate with their previous contributions.

How can this best be accomplished? By the savings banks, and the existing F. Sos. ? The services of the savings banks can scarcely be over-rated, and when the banks are more completely under public control, these services will be greatly enhanced. The F. Sos. have been left to the management of the artisans and labourers of the country, and the Gov. has interfered neither very largely nor very advantageously. It has been estab. by the valuable labours of Committees of both Houses of Parl., as well as by private inquiries, and by the failure of great numbers of clubs from one end of the kingdom to the other, that many of these Sos. are imperfectly organized; and that in their present state they are little more than "a delusion and a snare" to the working classes. The industrious man contributes in youth and in the prime of life to a So. which fails when age and infirmity overtake him.

All the successful bus. of the country is carried on by the co-operation of masters and men; and the first evident objection to the Benefit Club is that, in general, it implies the dissociation of these two classes, in a bus. as difficult as any of the trades of the country—in a bus. which is carried on by elaborate T., calculated by actuaries, involving the prob. of life, funds accumulating at compound int., and the secure investment of money during the whole life of a generation of men. One of these clubs undertakes what no large ins. so. is willing to undertake, and, without an actuary, plays with the certified edged tools of actuaries. . . . Clerks, artisans, and all the labouring classes obtain salaries and wages—incomes—much earlier in life than the professional classes, and it is a fortunate circumstance, of which they are apparently unaware, that by setting aside every year a small sum for 8 or 10 years after the earnings commence, they can insure their lives, purchase a pension in old age, and insure a provision in sickness, before they are married, and thus leave the whole of their income after marriage free to meet the increased expenses of housekeeping. Masters should point out this to the men and servants; they should assist as well as encourage their efforts at prudence.

It is for many reasons desirable that in Health Ins. the masters and men should be associated, and that the pay of the men in sickness should be under the same regulation as the pay in health, or be a part of the bus. of the concern. The importance of sanitary arrangements, of ventilation, cleanliness, and temperance, by which men are kept in health and vigour, is thus brought constantly under the notice of employers, as well as of the workpeople themselves, by the financial state of the fund, to which the masters and men contribute in regulated proportions.

But it is evident that to make the Health Ins. fund manageable, it must be of a very simple construction, and involve no contract between the fund and the contributors of much larger duration than that between the man and the master, or that cannot at any time be equitably closed. . . .

Dr. Farr's ingenious T. for accomplishing these results will be given under F. Sos., MORT. AND SICKNESS EXPERIENCE OF, at this date, and will be found worthy of the most careful consideration. He continues:

The advantage which this simple scheme offers is, that the whole finance of the fund is a matter of common account, and that the outgo and the income can be balanced every year. There is no distant outstanding claim on behalf of aged members, as the members are all under the age of 65, and pay every week a prem. to the chance of sickness during the week. *If the sickness be found to exceed the average, and cannot be reduced, as will be found to be the case in some unhealthy trilles and towns, the prem. must be raised in such proportions as the mort. of the place and the experience of the fund justify.* To cover any temporary loss of the fund the prem. may be doubled for a week or two.

The details of the arrangements and the rules for carrying the plan into operation must necessarily differ according to circumstances. To large concerns, where many men are employed and the bus. is permanent, it is particularly well adapted, and can be managed by a clerk under the manager or partner who engages and pays the men. It is also applicable to small firms and masters who may choose to associate for this purpose.

After the age of 65 the line of demarcation between health and infirmity or sickness becomes indistinct, and for the practical purposes of health ins. can be drawn with neither certainty nor uniformity. What under one set of circumstances is considered health is under another paid for as sick time. The provision for the age of infirmity and inproducation should therefore be of the nature of a deferred annu.: the prem. commencing early and ceasing about the age of 25 or 35; the annu. opening at 65 on the plan hereafter sketched.

A few liberal, generous, and well-estab. firms will grant pensions to their old servants: but unless they are perpetual corporations the provision which they can offer for the declining years of life wants that element which constitutes its chief value—certainty. Neither can they keep the necessary complicated accounts which are involved in the grant of annu. or pol. on lives. That great corp.—the Government—alone, with the advantages of publicity, can receive small deposits of money in the early life of a generation, invest it at compound int., and pay the accumulated amount at short intervals to the survivors as they descend the vale of years. *The Gov., better than short-lived private individuals or speculating cos., can keep small savings at call; and at the same time allow interest in savings banks, better, cheaper, and under surer guarantees of security than individuals or cos.; it can also insure the lives of the working classes, and encourage them to make at a small sacrifice for their families such a provision as will lighten the sorrows and sufferings of thousands of fatherless children and widows.*

The pension for meritorious and long service, as well as the life ins., should therefore be granted under arrangements quite separate from those of the fund for health ins. But the connexion between the master and the men should be still kept up in this branch of the transaction. The Gov. would help the master to grant his men pensions in their old age, and small pol. of ins. on their lives. The master may, as in the case of prems. for health ins., stop the prems. for life ins., and for pensions in age, out of the weekly wages, and pay the proceeds quarterly to the Gov. receiver. . . . The masters would undoubtedly on reflection, if they were able, contribute proportionally to the pension and ins. fund, and thus estab. an indissoluble and friendly bond of union between them and the companionships of men in their service.

Dr. Farr saw that there would be two classes of objections to his plan. The first, why contract this intimate connexion between masters and their workpeople? The second, let the workpeople spend their wages, earned at the market rate in the labour market for the time being, as they will. Do we not pay the poor-rate? When they are sick, or old, we have done with them! "The answer to this is, that in conforming to the dictates of his heart, and taking an interest in their permanent happiness, the master is actually only

paying his men in the way most advantageous to himself as well as to them. . . . Many already do for their men almost all that can be desired; and others, in the midst of anxieties, silently devote thought and time to their permanent interests of which the world is not aware." Regarding the opposite class of objectors he says:

The men of prudence living on wages everywhere admit the utility and necessity of some provision for sickness and age. To afford that provision F. Sos. of every variety of form have been founded, amounting it is said to 20,000 or 30,000, in which more than 3,000,000 of members are one way or other enrolled; and of which the man is in the hands of the men themselves, or in the hands of officers of their own appointment. The members meet at public-houses; they enjoy each other's society; they have festivals. The Odd Fellows, Foresters, Shepherds, Druids, and other Sos. have officers in ranks, orders, and costumes, which recall the old traditional Sos. of the middle ages. These Sos. differ, however, in an important respect from the Gilds and Trade Cos., of which, in their orig. conception, the masters and the men were brother members. And the experience of their operation as the depositaries of the savings of the people has been by no means favourable. Their expenditure, it has been admitted on all hands, has been extravagant; they have been frequently defrauded by officers under no supervision; they have made large promises and entered upon engagements which they can never keep.

There can be no reason why persons in the same ranks should not associate together; why they should not meet at festivals, enjoy common entertainments, and belong, as the other classes do, to their "club," if their means will allow them to do it. And there are many occasions on which they may advantageously meet. By law they can form combinations for raising the rate of wages. But all these meetings involve expenditure. *Such objects, however interesting to the working classes, should be entirely dissociated from the serious bus. of making a provision against sickness, infirmity, old age, and untimely death, as they are among the higher and professional classes.* And it is evident that if they seek ins. under the new plan, the man of the sickness fund by their masters will cost nothing; that the advantages will necessarily be larger; that their fund will always be solvent; and that by a very simple arrangement, the small necessary guarantee fund can be placed in perfect security.

The practical development of Dr. Farr's scheme of Sickness Ins. will appear in the T. given under F. SOS., MORT. AND SICKNESS EXPERIENCE OF; while the life and annu. parts of the project will be treated under GOV. INS. SCHEMES; INDUSTRIAL INS.; and LIFE INS., at this date.

Dr. Farr said, in a later part of the same Rep.—"Finance of Life Ins."—p. 54:

The present system upon which F. Sos. are managed is liable to serious objections. The accounts of a small So. can only be audited by an actuary, and present as many points of difficulty, and may give as much trouble as the accounts of a large office. The process is attended with an expense beyond their means, and is consequently rarely if ever performed. When they are wrong, they are never set right; and it is stated on good authority that great numbers of the Sos. are insolvent. If the prems. and allowances were calculated, and the bus. conducted on a plan approaching uniformity, T. might be prepared which would greatly facilitate the audit of the accounts, involving all the difficulties of ins. valuations. But in the present state of affairs, small Sos. should, I think, adopt a simple form of T., in which questions of compound int. do not enter; and which has the further advantage of not requiring the deposit or accumulation of large sums of money. A T. of this form is given at the end of the paper. This is the T. we have already referred to.

1854.—There was printed by order of Parl. (26 July) this year: *Rep. from the Select Committee on the F. Sos. Bill; together with the Proceedings of the Committee, Minutes of Evidence, Appendix and Index.* To this Committee, of which Mr. Sotherton was again Chairman, and on which were Mr. Adderley, Mr. Bonham Carter, Mr. Mowbray, Mr. Wickham, Mr. Evelyn Denison, and other well-known members, had been referred by the Ho. (of Commons) numerous petitions and the recommendations in the Reports of the Committees of 1849 and 1852, together with the Bill then before the House. Among the witnesses were Mr. J. Tidd Pratt, Mr. Justice Wightman, Mr. Baron Alderson, Mr. Justice Martin, Baron Pollock, and Mr. Arthur Scratchley. The Rep. says:

Your Committee have received some valuable evidence on the subject of the clause relating to Burial Sos. . . . Your Committee have withdrawn the 4th clause, which required all Sos. to be regis. The object of that clause, as orig. drawn, was to insure that in all F. Sos., whether regis. or not, the same conditions should be observed in regard to the payment of burial money. . . . Your Committee, however, taking into their consideration the state in which members of unregistered Sos. find themselves, from being unable to have recourse to a remedy by law if they should be defrauded or unfairly treated by the officers of these Sos., are of opinion that this, which has hitherto been treated as a privilege, ought rather to be extended, as a matter of justice and policy, for the protection of members; and they have therefore introduced a clause towards the end of the Bill giving a power to the members of all F. Sos., unregistered, as well as regis., to sue and be sued as between themselves and their own officers. In this respect the difference between regis. and unregistered Sos. hereafter will be, that the former—being incorp. by law—will be capable of sustaining or bringing a suit against persons not of their own body; the latter will have no such powers except as between themselves.

Your Committee have sanctioned the estab. of a Board of unpaid Commissioners, in accordance with the recommendation of the Select Committee which sat in 1849, and of another which sat in 1852. There was evidence furnished to each of these Committees to show that some public centre of information was required, to which persons might apply when desirous of estab. or of remodelling a So.; or of ascertaining the best mode of dealing with the pecuniary condition of a So. not yet insolvent, but virtually in its decline.

The Registrar has properly nothing to do with any of these questions: his office is to see that the rules of the So. sent to him for regis. contain the provisions required by law, and nothing contrary to it. But his certificate is constantly appealed to, under a mistaken notion that it implies his approval of the rules, or an authoritative sanction of the T.; and this mistake has led to frequent disappointments and injury; no public department indeed ought to undertake so grave a responsibility as that of deciding what rules or T. should be adopted by any So.; but it might with advantage and safety supply materials and information which a So. on its own responsibility may reject or accept, and so guide its own course by the result of the experience of others.

Your Committee have assigned to this board the power which former Acts gave to the Attorney General, of sanctioning the formation of a So. similar, though not identical with any of those enumerated in the 2nd clause: and even of dispensing with some of the provisions of this Act, in cases when circumstances render it impossible or highly inconvenient to Sos. to comply with them, and which consequently cannot obtain from the Registrar a legal certificate.

Your Committee have more clearly defined the duties of the Registrar, by omitting certain discretionary words, which have sometimes led to imputations of a want of uniformity in his decision. They have also erased from the Bill the fees hitherto payable upon regis.—for this reason, that our Parl. has withdrawn the principal privileges which formerly were an inducement to Sos. to register. It seems to the Committee a mistaken policy to deter them by fee, which, though trifling in amount, is sometimes a real obstacle, sometimes a plea, with the man. of Sos. for abstaining from taking the steps necessary for acquiring a legal character.

In regard to the settlement of disputes, your Committee have followed the existing law, by declaring that they shall be settled in such a manner as the rules shall direct—whether that be by a method of appeal amongst the members, or by arbitration, or by Justices, or by the County Court. Questions respecting the removal of a trustee, or a misapplication of funds, your Committee refer to the County Court; but in case any officer or member should fraudulently obtain possession of the money or securities of any F. So., immediate recourse may still be had without delay to a Justice, but the misdoer might escape before the Judge of the County Court should hold his next sittings, or be in a condition to interfere.

The subject of "Child Murder" in view of obtaining money from Burial Sos. is next considered. This part of the subject falls to be considered by us under INFANT MORT; but we propose to give the brief result of the conclusion of this Committee thereon here:

Your Committee refer to the evidence to show that no sufficient grounds exist for the general suspicion which seems to have been entertained on this subject. They believe that suspicion has been almost entirely founded on the few cases brought to trial, exaggerated by the horror with which the idea of a crime so heinous would naturally be regarded.

The remedy of the Committee was to fix a limit upon the amount which might be insured upon the life of a child. The illegal nature of ins. contracts where no real insurable interest exists had been pointed out by some of the legal witnesses called:

One other subject only remains to be noticed in this Rep., namely, the anomalous position of Sos. orig. enrolled under F. Sos. Acts before there was any limit fixed beyond which it should be illegal to carry their operations. Several Sos. so enrolled have conducted their bus. to an extent similar to that of assu. cos. All the privileges granted by their orig. Acts have one by one been repealed: the chief of these were a power of investing with the National Debt Commissioners at an advanced rate of int., exemption from stamp duty, and the right of leaving money payable on the death of a member to his nominee. Whilst these privileges have been withdrawn, these Sos. have still been under restrictions which are not imposed upon other assu. cos. regis. under the Joint-Stock Cos. Act. Their case was fully entered into by a Select Committee which sat in 1852, and in the evidence then reported all particulars may be learned.

Your Committee concur with that former Committee in thinking that these Sos. should be dealt with exceptionally, and that an Act should be passed withdrawing them altogether from the provisions of the F. Sos. Act, except such as are indispensable for the maintenance and protection of their orig. constitution, which it would be a violation of the faith of Parl. to destroy.

Your Committee have amended the Bill referred to them, and now report it to the House.

We have to notice a few special points in the evidence.

Mr. J. Tidd Pratt said (Q. 87) that the average number of rules which he had certified since the Act of 1850 had been about 1300, "but the major part of them are only chargeable with half-crown fees."

Mr. Samuel Moreton, Manager of two extensive Sos. in Birmingham, was called, and examined as follows:

1646. Are you able to state what would be the effect in Birmingham of the 4th clause [rendering regis. compulsory] if it became the law of the land?—... It would destroy something like 300 Sos. in Birmingham entirely. There are a great number of Sos., perhaps 500 altogether, which exist in manufactories only, having no real governing body among them. But they are of great assistance to working men. The money is received, perhaps by the head clerk of the estab. on the Saturday evening in small amounts, say 3d. or 4d.; it would be impossible for those Sos. to enrol; they could not enrol inasmuch as the members only remain members so long as they work at the manufactory—consequently, if a man worked at 10 manufactories in the course of 4 or 5 years, he would be compelled to become a member of 10 different Sos., which he could not do under any circumstances, and he may be too old to enter fresh Sos. Again, it would destroy them, because the machinery requisite to conduct an enrolled So. would be too expensive and too complicated for a So. in a manufactory. Again, many Sos. that I represent have to deal with the money at their command in different ways (and they have never had occasion to appeal to the law in any way). They have money out in forms and shapes which the present Bill would discountenance. For instance, many of our Sos. have what are termed loan funds. This is a fund consisting of a certain amount of the cap. of the So., from which amounts varying from £5 to £15 are lent to the members, on a bond-note; this is paid back by fortnightly instalments, running over a period of 12 months, and for the use of which 5 p.c. is charged, and paid when the loan is taken out. This brings a good revenue to the So. One So. has as much as £700, another £800, invested in this way among its members. Supposing the Act came into operation next Jan., it will be impossible to get this money in. There are many other objections; but without entering into any selfish objections, and saying this is a gross attack upon our liberties, we are prepared to show... that we are fully able to govern ourselves. We have many objections to enrolment: we object to Revising Barristers, or those who have the care of revising our art., because they make alterations in our laws which are altogether unsuited to the members in every shape. I speak now from facts that have occurred in Sos. that were enrolled, and have now broken through the enrolment. They submitted at different times alterations of their rules to Mr. Tidd Pratt, and he would not allow those alterations to be made.

Mr. Arthur Scratchley, M.A., was examined, in substance as follows:

1766. A paper containing 3 clauses has been offered to the Committee by one of the members, Mr. Fitzgerald: can you give the Committee any information in respect to the first of them, and why it is rendered desirable?—The reason why I brought under the attention of Mr. Fitzgerald the desirableness of such a clause being passed is this. The man. of a great many F. Sos. in Eng. which are connected with the F. Sos. Inst. have felt for a long time that F. Sos. have not been able to succeed from their failing in the early years of their existence [to obtain a sufficiency of members?]; and they have considered in what way they could get over these first years so as to arrive [at] the time at which there would be enough members to enable them to succeed. They have looked to similar inst.—the ins. cos. of Lond., which deal with risks arising from the laws of average; but which have generally considered it necessary to have a protective cap., commonly called proprietors' cap. And they have felt that although life assu. may have been found, by experience, not to require, under certain

circumstances, a proprietary cap., yet that in this species of average, the exact data of which cannot be accurately obtained, they should not proceed without some protective or proprietary cap. They have therefore thought as to any F. So. either already estab. or to be estab., that if it were allowed to create in itself some species of that guar. cap. which I have called proprietary cap., so as to copy the idea of the Lond. cos., by issuing shares to parties taking an interest in the formation of such Sos., then there would be a fund collected which would enable it to protect itself against the chance of failure in its infancy.

My own experience satisfies me, and I am confirmed by the views of really practical men, of F. Sos., that during the earlier years of a F. So., however soundly constructed its T. may be, you cannot secure it from failure, because there will not enter a sufficient number of members to make it come within the laws of average. If in a country town only one was formed, and it was supposed to be on sound principles, I can imagine it would have a sufficient number of members to make it safe; but if in the course of any one year there are a great number of F. Sos. formed, they interfere with each other, and so limit the number of members which each has, to which the T. can be applied. The result is, that both from the necessary expenses, and from their having but a few members, they are not able to meet the sickness or other claims upon them which arise in the earlier and subsequent years. . .

1768. Your suggestion is that a sum of money, to be fixed at a small amount, should be subscribed by those who wish well to the estab. of a F. So. ?—Quite so.

1769. And that such sum of money so contributed shall bear interest ?—Such money should bear interest and other privileges, so as to induce persons to subscribe to the fund.

1770. What other privileges ?—Similar privileges to those which are enjoyed by the shareholders in an ins. office.

1771. In the nature of a bonus when the affairs of the So. were such that it proceeds on a safe footing, and there was a guaranteed fund of their own ?—That is exactly what those people think and say. Assume the clause passed, and a F. So. formed with such a cap., the members who would enter that So. would feel, supposing the ordinary subs. were insufficient to meet the claims arising, that there would be a fund which could be drawn upon to meet the chances of a dissolution of the So.

Mr. Scratchley stated that such a So. had been formed in a large town in the midland counties [Leeds]. It was enrolled under the Joint-Stock Cos. Act.

1801. I ask you whether the proposition which you now make is not a proposition to divert a portion of the profits of the So. which would have been applicable to the benevolent purposes for which this So. was founded, for the benefit of the debenture-holders ?—It is desired to divert a portion of the profits that could be created by the introduction of the new system, which portion of the profits would be given to those who had been mainly instrumental in facilitating its success.

1802. In fact the profits would never have accrued but for the adoption of this new principle ?—Yes.

1803. Therefore there is no diversion from those who would have received a benefit; but it is merely a profit which occurs from the adoption of an entirely new system ?—Yes.

1804. Those shares which are not to be withdrawn would, I presume, be transferable ?—Yes.

The sitting of the last-named Committee was followed by the passing of no less than 4 several enactments relating to F. Sos., viz.

1. The 17 & 18 Vict. c. 50—*An Act to Continue an Act of the 12th of H. present M. for Amending the Laws relating to Savings Banks in IRELAND, and to authorize F. Sos. to invest the whole of their funds in Savings Banks.* This was merely a temporary measure.

2. The 17 & 18 Vict. c. 56—*An Act to make Further Provisions in relation to certain F. Sos.*—which recites :

Whereas certain F. Sos. were estab. and enrolled under the Acts passed in the 10th year of H. late M. King Geo. IV. c. 56, and the 4 & 5 of H. late M. King Wm. IV. c. 40, relating to F. Sos., or one of them. And whereas the scope and operation of F. Sos. since the passing of the said Acts have been limited by law in respect of the amount for which pol. of assu. payable on the death of members of such Sos. may be granted; but some of the said Sos. estab. as aforesaid, and which grant or effect pol. of assu. payable on death, have not been so limited, and such last-mentioned Sos. have therefore been excluded from the benefit of certain provisions and privileges made for and granted to F. Sos. in respect to exemption from stamp duties and otherwise; and it is desirable that there should be special provisions made with respect to such of the said Sos. so exempted and excluded as aforesaid.

It is then enacted—1. That this Act should apply only to such Sos. as granted policies on death exceeding £1000; these should cease to be F. Sos., and should not be affected by any future Act relating to F. Sos. 2. The Acts and parts of Acts affecting F. Sos. before the passing of this Act to remain in force as to these asso., except as hereinafter provided. 3. But the asso. not to be exempted from stamp duty, nor to make their pol. payable to nominees. 4. Sos. affected by this Act might carry out the objects allowed by their rules. 5. Provision for the investment of the funds of Sos. affected by this Act. 8. But not to invest in savings banks. The other sections give power to Judges to enforce attendance of witnesses before arbitrators; and to the asso. affected to purchase and hold buildings for offices.

This Act is known as the "F. Sos. Discharge Act"; and it more particularly applied to the *National Provident Life, Clergy Mut., Friends Provident, Temperance Provident, and Kent Mut. Life.* [LEGIS. FOR AND AFFECTING INS. ASSO.]

3. The 17 & 18 Vict. c. 101—*An Act to Continue and Amend the Acts now in force relating to F. Sos.* This provided—1. That the Act of 1850 should remain in force until the next Session of Parl. 2. That copies of rules were to be taken off the county files, and deposited with the Registrar of F. Sos.

4. The 17 & 18 Vict. c. 105—*An Act to Amend the Laws relating to the Militia in E. & W.*—which provided (section 44) that enrolment in the Militia or Naval Coast Volunteers should not cause forfeiture of interest in any Benefit So.

Mr. A. G. Finlaison laid before Parl. the 2nd part of his Rep. on F. Sos. Sickness and Mort., viz. *Further Rep. and T. prepared under the Direction of the Lords of the Treasury, by the Act. of the National Debt Office, on the Subject of Sickness and Mort. among the Members of F. Sos., as shown by the Quinquennial Returns to the 31st day of Dec. 1850,*

received by the Regis. of F. Sos. in Eng. under the Provisions of the Act 9 & 10 Vict. c. 27. This Rep. will be dealt with under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.

In the *Quarterly Review* for Dec. this year there was contained an able art. on "Provident Inst. and F. Sos.," of which we can only quote the opening passages:

Of all the instinctive principles of human nature which are found to develop themselves with activity in civilized society, there is perhaps none at once more powerful, universal, and beneficial than that which suggests the provision of resources against the wants of the future. The Bee and the Ant afford typical examples of this instinct among the lower order of animals, and in its simplest form. In the case of man it assumes the add. shape of a propensity to lay by, or *save*, not with a view to the preservation of life only, but likewise to the command of an abundance of the means of enjoyment. In one or other of these shapes it is the source of all that accumulated stock of wealth which distinguishes civilized from savage life, and constitutes the essential element of material prosperity in a people.

The universality of this saving spirit, and the extent to which it is sure to develop itself under favourable circumstances, have not, we think, been sufficiently adverted to by the investigators of social science, or more attention would have been paid to arrangements likely to bring about so generally beneficial a result. No doubt it has always been recognized that security must be afforded to the possession and freedom in the disposal of wealth, as conditions necessary to its rapid accumulation. But the legislation of civilized countries has limited itself usually to this amount of encouragement to the provident or saving propensity by which property is created and accumulated. It is only of late years that any attempts have been made (tentatively and experimentally, as it were) to afford direct facilities for its exercise. The success, however, of these experiments, as far as they have gone, has been such as to justify the most sanguine expectations for their extension.

There is much more in this art. that is of great interest.

Mr. Henry Tompkins read before the Inst. of Act. a further paper [see 1852]: *Observations upon the Sickness and Mort. Experienced by F. Sos.* The subject of this paper falls for consideration under F. SOS., MORT. AND SICKNESS EXPERIENCE OF, where the several points of which it treats will be viewed in detail. Mr. Tompkins in this paper estimated the number of members of F. Sos. in E. and W. "at near three millions."

This year there was founded the *London and South-Western Railway F. So.* Membership in this So. is compulsory on all engaged in the traffic department, but optional with those in other departments.

The Committee of Man. consists of 4 members nominated by the Railway Co., and 10 elected members, with treasurer and trustees *ex officio*.

The Co. subsidizes the So. by a capitation fee of 3d. p. week for every member, so long as he remained in the service of the Co. Since 1863 this orig. subsidy has been compounded for, by a contribution of £600 p.a., irrespective of the number of members. The Co. also guarantees 5 p.c. int. on the funds of the So. deposited with the Co. by way of loan.

Since 1870 persons leaving the employ of the Co. must cease to be members of the So.; but the So. is authorized to pay such retiring members a sum by way of surrender value, which is left optional by the rules; but in practice is usually 50 p.c. of the past payments—less, we assume, benefits previously received.

The scale of contributions and benefits (which are graduated according to age) was orig. framed by Mr. Neison, sen.; and he certifies that in framing them he took into account the subsidy of the Railway Co.

In 1867 a question arose whether the scale of benefits might not be increased. Mr. Neison, jun., was consulted; he reported that the finances of the inst. would not admit of any increase, and supported his position by the following figures, which appear conclusive:

<i>Liabilities</i> —Present value of Superannuation		£39,088'700
" " Sickness		27,853'090
" " Death (males)		5,199'503
" " " (females)		1,733'200
" " present superannuation		2,695'483
		£76,569'976
<i>Assets</i> —Present value of future contributions		£37,775'393
" " Directors £600 *		12,000'000
Funds in hand		9,411'952
		59,187'345
Deficiency		17,382'631
		£76,569'976

The rate of int. employed in the valuation is not stated in the abstract before us; but as the Rail. Co. guarantee 5 p.c. on funds in their hands, it may be that the deficiency shown was more apparent than real.

On 1st Jan. 1872 the So. had 3091 members, with an accumulated fund of £13,622 18s.

There was founded this year the *Locomotive Engineers and Firemen's F. So.* [distinct from *The Locomotive Steam Enginemen and Firemen's F. So.*, founded 1839]. Its head-

quarters are at Salford. Its position at the end of 1870 was as follows: 56 branches; 6221 members. Its invested funds were £42,304. Its members are limited to the occupation indicated by the title of the So. It purports to be an Amalgamated So.; but its branches are separately regis. Its scales of contributions and benefits are graduated. The entrance fees range from 5s. to £2 14s. 6d. between the ages of 18 and 40. The payments for benefits are kept separate.

The contributions are 10d. fortnightly from ages 18 to 25; 11d. from 25 to 30; 1s. from 30 to 35; 1s. 2d. from 35 to 40. The benefits are 10s. a week for 52 weeks in sickness; £10 at death, if a member 12 months; £18 if 18 months; £5 on death of member's wife. On entering a second wife for benefit, the member pays 21s. entrance. The funeral money is raised by levy on all the branches as may be needed from time to time. There is a pension fund, to which each member contributes 1s. p. quarter for the purpose of rendering relief to any member who, by the loss of eyes or a limb, or the use thereof, or by accident or permanent sickness or old age, or other infirmity, may be rendered unable to follow his regular employment. The allowance is 5s. p. week. No member may claim on this fund before 18 months' membership; and then forfeits all claim to sick pay.

Germany.—We shall hope under this title in its alphabetical place to give some details regarding F. Sos. in Germany. At present we have statistics relating to *Berlin* only. There were this year 38 Asso. answering the general designation of F. Sos. These were under the control of the Police Commissioners; but there were many Trade Sos., including more or less of the benevolent element. These were under the supervision of the Magistrates. The following details were furnished by Dr. Hübner.

The number of members in the 38 Sos. in 1854 was 57,380. The number of deaths in the year, 1858—thus 1 died out of 34. The amount paid in respect of deaths was £8832, or on an average £5 6s. The amount paid for sickness was but £1861—indicating that the Sos. were chiefly for burials. The accumulated funds reached £19,842. The number of members were increasing at about 1000 p.a.

The Burial So. called the *Neue Grosse Berliner Sterbecasse* was the most extensive and important in its operations. It was estab. in 1841, and pays £7 10s. on the death of a member after being admitted 6 months, and £15 after a year. The contributions of the members are (exclusive of the quarterly payments of 3d. for the expense of man.) partly single payments, or entrance fees, varying with the age of the person admitted from 3s. between 20 and 40 to £1 2s. 6d. between 55 and 60; and the future contributions are also regulated according to age on admission. Thus on the death of a member, those admitted between ages 20 and 39 contribute 3d.; those between 40 and 49, 3½d.; and those between 50 and 60, 4½d. These assessments may be doubled by the managers if an excessive mort. occurs; and if the number of members decreases so that the contributions do not produce the amount required to be paid, the man. are empowered to raise the assessment until it will yield the required sum.

There is a T. which shows the number of members coming in and going out by death and otherwise from 1841 to 1854 inclusive, and this indicates a steady mort., except in the year 1849, when it was unusually heavy.

We have some particulars regarding the *Trade Sick and Burial Sos.* On the 1st July, 1854, there were 70 of these in Berlin, with a total of 34,748 members. The trades with the largest number of members were the iron founders, 7130; joiners, 3261; masons and bricklayers, 2400; tailors, 2290; while among the lowest numbers were pursemakers, 17; swordcutlers, 4; and sievemakers, 1. The contributions of the members reached £12,946 in that year. The greater part of this was expended for medical assistance. The members of 67 of these Sos. received medical assistance through the Trades' Sickness Union—*Gewerks Kranken Verein*.

There is another class of Asso. prevalent in Berlin, called Sos. for Preservation of Health. These really are Medical Advice Sos. They guarantee, for certain payments, medical assistance and medicine in case of illness. The particular occupation of a person does not debar from membership. They are formed in many districts—but chiefly in those where the residents are poor. The better class of residents frequently join for the purposes of example, but make no claim for gratuitous treatment. Sometimes they even preclude themselves from doing so by the rules.

Nearly all the Sos. founded before this year had become dissolved. In 1854 they were put upon a new foundation, whereby a member changing his residence from one part of the city to another was to be received into the So. of the district into which he had removed. The most important of the Sos. of this class—and one which did not succumb with the others—is the *Friedrichsstädtischen*. In 1850 it had 1027 members; in 1853, 1712; while in 1854 the numbers were again down to 1049. In this last year it supplied to its members 3954 prescriptions, 4822 verbal directions. The number of persons treated were 509 men, 787 women, and 905 children—total 2201. The cost of the medicines was £107.

1855.—There was enacted 18 & 19 Vict. c. 63—*An Act to Consolidate and Amend the Law relating to F. Sos.*—which recites, "Whereas it would conduce to the improvement of the Law relating to F. Sos. if the several stat. relating thereto were consolidated, and

certain add. and alterations were made therein." This Act repealed all the previous Acts relating to F. Sos. save and except as to any offences committed, or penalties or liabilities incurred, or bond or security given, or proceedings taken under the same before 15 Aug. 1855;—except the "F. Sos. Discharge Act, 1854"—with this important proviso: "Provided, nevertheless, that notwithstanding the repeal of the said several statutes, every F. So. now subsisting, which heretofore had been formed and estab. under the repealed Acts, or any of them, shall still be deemed to be and shall continue to be a subsisting So. as fully as if this Act had not been made, unless, and until such So. shall be dissolved or united with some other So. (sec. 2). Their rules were to continue in force, and all enrolments at Sessions were to be sent to Registrar of F. Sos. (3). All contracts, etc., were to continue in force (4). Salary of Regis. of F. Sos. in Eng. to be £800 p.a.; in Scotland and Ireland £150 p.a., and expenses of their offices (7 and 8). Then:

9. It shall be lawful for any number of persons to form and estab. a F. So. under the provisions of this Act for the purpose of raising by voluntary subs. of the members thereof, with or without aid of donations, a fund for any of the following objects:

1. For insuring a sum of money to be paid on the birth of a member's child, or on the death of a member, or for the funeral expenses of the wife or child of a member.

2. For the relief or maintenance of the members, their husbands, wives, children, brothers or sisters, nephews or nieces, in old age, sickness or widowhood, or the endowment of members or nominees of members at any age.

3. For any purpose which shall be authorized by one of H. M. Principal Secs. of State, or in Scot. by the Lord Advocate, as a purpose to which the powers and facilities of this Act ought to be extended.

Provided that no member shall subs. or contract for an annu. exceeding £30 p.a., or a sum payable on death, or in any other contingency, exceeding £200.

No money to be paid on the death of a child without a copy of the entry of the regis. of deaths (10).

Sec. 11 recites, "And whereas many *Provident, Benevolent, and Charitable* Inst. and Sos. are formed, and may be formed, for the purpose of relieving the physical wants and necessities of persons in poor circumstances, or for improving the dwellings of the labouring classes, or for granting pensions, or for providing habitations for the members, or other persons elected by them, and it is expedient to afford protection to the funds thereof;" and it then enacts that the rules of these asso., where not repugnant to the law, might be regis.

Stat. as to *unlawful oaths* not to apply to Sos. regis. under this Act (12). Sos. might be dissolved; provisions stated (13). Sos. might unite with others, or trans. engagements (14). *Minors* might be elected members (15). Buildings for purposes of Sos. might be purchased or leased (16). Trustees might be appointed (17, etc.).

The rules of all Sos. estab. under this Act were to contain certain specified objects and powers (sec. 25). Then there were regulations for regis., and for certifying T. in case of the granting of annu. (26). Also for alteration and amendment of rules (27). Notice of change of place of meeting to be sent to Registrar (28). Circulating of false copies of rules, etc., made a misdemeanor (29). Rules might be received in evidence (30). On death of member sum under £50 might be paid without administration, etc. (31). Directions for investment of funds (32-6).

Sec. 37 provided that the exemptions from *stamp duties* under the Act should not extend to insurances above £200, or to *nominee* ins., except the pol. were payable to the executors, administrators, or assigns of such member, or the husband, wife, father, mother, child, brother, sister, nephew, or niece of such member. And no member was entitled to insure for more than £200 at death or a £30 annuity even by extending his ins. to any number of Sos. (38). Sec. 46 provided that Sos. estab. before 15 Aug. 1850 which had granted annuities of more than £30 p.a. on any one life should still have the benefits of this Act.

Trustees of Sos. might subs. to hospitals or prov. inst. (39). Disputes to be determined by rules (40), and in certain cases by County Courts (41). In cases of *unenrolled* Sos. disputes between Sos. and their own members to be settled as in enrolled Sos. (44). Sec. 45 required that the trustees of all F. Sos. should once in every year, in the month of Jan., Feb., or March, transmit to the Registrar a general statement of the funds and effects of such So. during the past 12 months, and a copy of the last ann. rep.; and should within 3 months after the expiration of Dec. 1855, and the like at the expiration of each succeeding 5 years, transmit to the Regis. a return of the rate or amount of sickness and mort. experienced by such So. within the preceding 5 years, in such form as shall be prepared by the Registrar; and an abstract of the same should be laid before Parl.

By sec. 47 any member serving in the Militia out of the U.K. might be charged an extra contribution not exceeding 10 p.c. on his ordinary contribution; or all payments by him and benefits to him might be temporarily suspended.

The Act was to apply to Sos. enrolled under the Industrial and Prov. Sos. Act of 1852; and was to extend to Gt. Brit., Ireland, the Channel Islands, and the Isle of Man.

By this measure 17 previous Acts were repealed.

By the 18 & 19 Vict. c. 35—Income Tax Exemption Act—it was enacted: 1. Persons having made assu., or contracted for deferred annu. for themselves or wives, with F. Sos., to be entitled to the benefits of the 16 & 17 Vict. c. 34—that is, to be allowed an abatement in respect of the ann. prems. paid.

Mr. T. R. Edmonds contributed to the *Assu. Mag.* [vol. v. p. 127] a paper: *On the Laws of Mort. and Sickness of the Labouring Classes of England*, wherein the author says:

Within the last few years a very great add. has been made to the previously existing small stock of obs. on the mort. and sickness experienced by members of F. Sos. . . . The first of these add. is due to Mr. Neison, and embraces more than 1,000,000 years of life, observed upon during the 5 years ending with 1840. The next add. proceeded from a very large F. So. called the "*Manchester Unity of O. F.*," and embraced about 600,000 years of life, observed during the 3 years ending with 1848—this obs. having been made by the Corresponding Sec. of that So., Mr. Ratcliffe. The third and last add. to this department of knowledge has been made by the authority of the Brit. Gov., the results having been pub. within the last half-year. Mr. Finlaison, jun., has been employed to make this obs., which extends over the 5 years ending with 1850, and embraces about 800,000 years of life. This last obs., like that of Mr. Neison, is founded upon official returns, which all regis. F. Sos. are required by Act of Parl. to make every 5 years.

The three obs. on F. Sos. made respectively by Mr. Neison, Mr. Ratcliffe, and Mr. Finlaison, jun., yield each its specific law of mort. and sickness. The three laws of mort. obtained are in accordance with the gen. law, which in all other obs. regulates, in adult life, the increase of mort. according to age. The gen. law is this—that the rate of mort. increases from puberty to the age of about 53 years at the rate of 3 p.c. ('02991) for every advance of 1 year in age; and after that age increases at the rate of 8 p.c. ('07966) for each year of age until the end of life. . . .

Previously to the publication of the three obs. now under consideration, there existed grounds for believing that in adult life the increase according to age in the amount or duration of sickness suffered in each year of life was regulated by the same two numbers which regulate the increase of mort. in the periods of "floreſcence," and "senescence" respectively. [For the sense in which these terms are used see EDMONDS' MORT. T.] . . . There is, however, a remarkable discrepancy between the three obs. as to the particular age at which the period of floreſcence is divided from the period of senescence. In the three obs. on mort. and the three obs. on sickness the limiting age is either at 53 or 46 years. According to Mr. Finlaison's obs., the limit dividing the two periods is at the age of 53 years, both for mort. and sickness; according to Mr. Ratcliffe's obs., the line of separation is at the age of 46 years, both for mort. and sickness; but according to Mr. Neison's obs., the limits of the division for mort. and sickness are different—that for mort. being at 53 years, and that for sickness being at 46 years of age. This difference of 7 years in the position of the limit during the period of floreſcence from that of senescence, occasions a difference of 40 p.c. in the relative mort. or relative sickness at ages above 53 years of age compared with ages below 46 years. For example: assuming (as is not far from the truth) the mort. and sickness stated by all three observers to be equal at ages below 46 years, it will ensue from the difference in the position of the limits just mentioned, that at any specified age above 53 years the mort. observed by Mr. Ratcliffe is 40 p.c. greater than the mort. observed by Mr. Neison and Mr. Finlaison; and that the sickness observed by Mr. Ratcliffe is equal to that observed by Mr. Neison, but 40 p.c. greater than the sickness observed by Mr. Finlaison.

The discrepancies just mentioned are of such magnitude as to detract considerably from the value of the results of all three obs. at any age exceeding 53 years. In order to extract a useful result from the apparently contradictory obs., it is necessary to devise some principle of reconciliation which will explain the inconsistencies. Such a principle is found in the assumption, that one particular class of facts has been treated in 3 different ways by the 3 observers, whether designedly or not. The class referred to is that of members retired on the superannuation or sick pension list. It appears highly prob. that Mr. Ratcliffe, in his obs., has treated all on this list as sick, and added their deaths to the general amount of deaths. On the other hand, it appears highly prob. that Mr. Finlaison has treated nearly the whole of this class as pensioners in good health, and removed them from obs., whether as regards sickness or mort. [This interpretation was confirmed by Mr. Finlaison in the 2nd part of his rep.] To reconcile the 3rd obs. with the two just mentioned, it is necessary to assume that Mr. Neison has designedly reckoned all superannuation-time as sick-time; and that he has unavoidably omitted the deaths of the same class of members, because they were omitted in the returns from F. Sos. submitted to him.

It may be useful here to remark that F. Sos. in general make these returns very reluctantly, and are careless as to their correctness or completeness. A very large proportion of the total returns from these Sos. has been rejected by Mr. Neison and Mr. Finlaison as unavailable, through obvious defects arising from negligence, wilful or otherwise. As regards the adopted residue of the returns containing no obvious defects, the results which they indicate cannot be entitled to much confidence, unless they are consistent with one another, and corroborated by other obs. founded upon facts better attested. It is fortunate for the public that there exists such an extensive and well-authenticated obs. as that of Mr. Ratcliffe, with which can be compared the obs. of Mr. Neison and Mr. Finlaison. From his position in connexion with the "*Manchester Unity*," we have in Mr. Ratcliffe responsibility for the facts as well as the conclusions; whilst Mr. Neison and Mr. Finlaison are responsible for arithmetical conclusions only, founded upon alleged facts whose correctness they had no power of testing.

He proceeds to point out that there is another way of treating the discrepancies mentioned, which is to assume that the statements of all 3 observers are of equal weight, and that the true statement is the mean of the three others. This plan he proceeds to try, and finds the results of the combined obs. can be closely represented by assuming the age of 48 years to be the point of separation of the period of floreſcence from that of senescence for mort. as well as sickness. "Out of 24 points of comparison of sickness and mort. at decennial intervals of age, there will be seen 23 points of agreement, whilst the only point of divergence (which is in "city" mort. between the ages of 55 and 65 years) is a specialty hereafter explained, in which all three obs. agree in departing from the theoretic numbers."

In the "*Manchester Unity*" at ages above 53 years the mort. was found to be 15 p.c. greater than the mort. of the total pop. of Eng. "This higher relative mort. is such as might have been anticipated from the So. containing less than the average proportion of members resident in the rural districts, and more than the average proportion of members resident in town and city districts."

According, however, to the obs. of Mr. Neison and Mr. Finlaison, at ages above 53 years the mort. in F. Sos. (containing the due proportion of rural, town, and city members) is 20 p.c. less than the mort. of the total male pop. of Eng. This is an unexpected result, which is open to doubt, more especially from the fact that there is a discrepancy in the statements of sickness at the same ages respectively made by Mr. Neison and Mr. Finlaison, which discrepancy, when converted into its proportional amount of deaths, would be just sufficient to make up the suspected deficiency of 20 p.c. The sickness suffered

at ages exceeding 53 years is 40 p.c. greater, according to Mr. Neison, than it was according to Mr. Finlaison. The alleged mort. being equal in the two cases, it would follow that the sickness of a pop. can be greatly increased without the deaths being simultaneously increased—a conclusion opposed to all experience. It is nearly certain that the extra 40 p.c. of sickness observed by Mr. Neison represents the life time of all superannuated members, which life time is altogether excluded from his obs. by Mr. Finlaison. If one-half of all superannuation-time be true sickness, Mr. Neison's obs., as compared with Mr. Finlaison's, will contain an extra 20 p.c. of true sickness, without any extra per-centage of deaths. If, however, an add. to the deaths (for omissions in the returns) be made proportionate to the extra per-centage of the true sickness observed by Mr. Neison, the resulting mortalities of all three obs. will be in harmony with each other, and conformable to expectation.

It is also to be remarked that if the mort. of members of F. Sos. is influenced by "selection"—as is prob. the fact—there will be add. reason for doubting the truth of the statement in question: for the statement of Mr. Neison and Mr. Finlaison is, that in F. Sos. the mort. in the period of florescence, as well as in the period of senescence, is 20 p.c. less than that of the total male pop. of Eng. of the same age. The former part of this statement is prob.; but the latter part is inconsistent with the former part, and the known ordinary effects of selection of good lives from the ordinary mass. In F. Sos. the great majority of the members are admitted below the age of 35 years; so that the effect of selection, being limited to about 15 years from admission, does not extend to the period of age exceeding 53 years. Assuming the reduction of 20 p.c. in the mort. during the period of florescence to be caused by "selection," there ought to be no difference in the period of senescence between the mort. of members of F. Sos. and the mort. of the classes from which the members have been selected. It may be useful here to remark, that a reduction through selection of 20 p.c. in the mort. for the period of florescence is equivalent in appearance to a retrogression of 4 years in the limit at which the period of senescence commences. If, as is the fact, this limit in the total male pop. of Eng. is at the age of 53 years, the corresponding position of this limit in F. Sos. affected by selection in the degree mentioned would be at the age of 49 years.

Other points in this valuable paper will be referred to in detail under LOCALITY; OCCUPATION; and under TOWN LIFE; while again under SICKNESS yet further points will arise for consideration. The preceding is deemed necessary to a full understanding of the T. here passed under review.

Mr. Samuel Brown read before the Inst. of Act. a paper: *On the Rate of Sickness and Mort. amongst the Members of F. Sos. in France*. The main contents of this paper will be noticed under F. SOS., MORT. AND SICKNESS EXPERIENCE OF; but the introductory passages should find a place here:

It is not without some degree of pride that we recall the fact that England has taken the lead in fostering and extending those social inst. which appear destined to carry out the beneficent design of procuring the greatest possible amount of happiness for the greatest possible number. She has not been afraid to encourage a spirit of self-reliance in the mass of the people, and to allow her working classes to associate freely in the effort to equalize the uncertainties of life, so that those who may have a little better fortune than the average may assist those who have a little less. Now and then indications may have been observed of fear amongst the ruling powers lest this asso. should be used for political purposes, and doctrines dangerous to the Gov. or the good order of society be thereby enabled to circulate too easily amongst classes who may have real wrongs to redress or fancied rights to assert; but in the long run good sense has prevailed, and Gov. has fortunately perceived that F. Sos. for mut. aid in sickness or want, and other asso. for bettering the condition of the working classes, give them a direct int. in the preservation of the public peace, and formed by their very principles the antidote to the fears they had excited. It would be gratifying, therefore, to perceive the rapidity with which they have spread in this country, could we at the same time feel that they have been conducted as well as they have been designed; and in their pecuniary point of view not fallen short of the expectations they have raised. The contrary has been lamentably the case.

He proceeds to review the causes which had led to such widespread failure. There can be no doubt (he says) that the great cause of this wretched condition of F. Sos. was "the want of data for a correct estimation of the risks, the ignorance of the managers of the rapid growth of their liabilities with the age of the members, the smallness of the numbers in each club (which probably arose from the desire which so many of the members had to be office-bearers), and the consequent inordinate expenses when compared with the income. These evils were found to prevail even in the best regulated."

Notwithstanding these serious drawbacks (he continues), "the benefits derived from the system have been so great, these unions are so adapted to the wants of the working classes, and have such an inherent vitality of good in them, that the evils complained of have been gradually removed, or are in process of it, and the defects of information are every year being supplied." He reviews the evils which had arisen in the early period from want of data, and shows how these were now overcome by the large contributions obtained by various recent writers. He then proceeds:

By the side of these large and important collections for this country, the obs. in France, to which I now beg to call your attention, appear very trifling. They are nevertheless important, as being the first fruits of a direct inquiry made with the laudable purpose of encouraging in France the increase of inst. which it is admitted owe their greatest development there to the example of Eng. Both in this and in the kindred subject of life assu., our neighbours, now so nobly emulous with us in the glories of war, are commencing a still more honourable rivalry in the arts and enterprises of peace, and in the social improvements which confer more than glory, in diffusing happiness amongst the people.

For the progress actually made with F. Sos. in France, see FRANCE, sub-heading F. Sos. (See 1864.)

During this year, too, the late Herr Rath G. Hopf, of the *Gotha Life Assu. Bank*, contributed to the *Assu. Mag.* [vol. v. p. 324] a paper on the operations of that asso. during the first 25 years of its existence; and after giving a comparative T. of mort. experience, wherein the results of Neison's and of Finlaison's obs. on F. Sos. were included, he says:

Every reader will be struck by the very trifling mort. amongst the members of F. Sos. in England. Though these Sos. comprise in a great measure only tradesmen, workmen in manufactories, and

labouring men; and though we are accustomed to think the mort. in the lower classes of the people greater than in the middle and higher ranks, by whom life assu. is generally resorted to, yet it is just the reverse in Eng. We cannot doubt the correctness of this obs., on account of the high respectability of the two authorities, Neison and Finlaison, the latter of whom entered on the inquiry of the returns made by the order of Parl. We will, however, limit this obs. only to England, and not extend it to the Continent, especially not to *Germany*. Respecting the latter country there are still wanting sufficiently sound and extensive obs. to answer this question with precision; *what, however, the author has observed in smaller circles does not admit the application to Germany of the obs. which have been made in Eng.* On the contrary, with us mort. among the members of Funeral Funds and Funds for Sick Allowances to persons of the less wealthy pop., *a great number of which exist in Germany, is much greater than in the middle and higher classes; and in order to enable these asso. to continue in existence, the contributions of the members must be fixed higher for Funeral Funds here [Germany] than for Life Assu. Cos.*

The subject will be further reviewed under GERMANY, sub-heading *F. Sos.*

There was pub. by Mr. W. Coates a pamph. : *Truth v. Falsehood*, bearing upon *F. Sos.*

This year was founded the *Manchester Warehousemen and Clerks Provident Asso.* Its operations are confined strictly to warehousemen and clerks within a radius of 6 miles of the Manchester Exchange. Members going to reside beyond this distance practically lose their interest in the benefits, unless they are employed at some branch estab. of a parent house in Manchester.

The So. has a scale of payments graduated according to age, and applying both to *loss of employment* and to sickness. The So. was refused regis. in consequence of the first branch of benefit; but regis. can now be obtained under a gen. authority from the Sec. of State by bodies giving benefit during want of employment.

The So. had in 1872 about 1500 members, and the number is increasing. Its financial position is believed to be good; indeed its man. claim to have a surplus of from £4000 to £5000. (See 1871.)

1856.—The first Ann. Rep. of the Registrar of *F. Sos.* in England and Wales was issued this year, viz. : *Rep. of the Proceedings of the Regis. of F. Sos. in Eng., in his Office of Registrar, and of the Principal Matters transacted by F. Sos. which have come under his Cognizance during the Past Year.* This Report was made in conformity with the Act of 1855, and brought the events down to the close of that year. Under the title of Suggestions for the Estab. of *F. Sos.*, etc., there occurs the following, which is even yet not fully understood :

It should be generally known that the *duty* of the Registrar in examining the rules of a *F. So.* is confined to the consideration of their being in accordance with law and the provisions of the Acts in force relating to such an inst.; and that although the Registrar certifies to the "legality" of the rules of a *F. So.*, it does not follow as a necessary consequence that the constitution of the So. is based upon good principles, or that the rates of payment are sufficient in amount to guarantee the promised benefits and allowances; but it is the province of an actuary to investigate the sufficiency of these rates of payment and allowances: and although the certificate of an actuary is not indispensably necessary, the individuals who form a So. should be exceedingly careful to ascertain, before submitting the intended rules to the Registrar, whether, by the rates of contribution being sufficiently high, they have good and reasonable grounds to justify them in holding out to the members promises of support in sickness, etc. And in order to commence a So. with any prospect of success, and certainty of meeting all the claims which may be made on the funds, T. of payments and allowances which have been approved by an actuary should be adopted; and it would seem advisable to limit the amount of pay in sickness so as not to exceed two-thirds of what a member can well earn.

He added :

... A *F. So.* during the first 10 years of its existence will prob. not have more than one-half the amount of sickness claims which it will have during the next 10 years—since it has been found that the average amount of sickness experienced by a man in the years between 20 and 30 years of age is only about one-half that which the same individual will experience in the course of the 10 years between 40 and 50 years of age; and the fact should always be borne in mind that increased sickness accompanies increased age. . . .

If there were not so many *F. Sos.* in which all the members pay the same amount of contribution, it could scarcely be imagined that there would be a question as to the desirableness of having the T. of payments graduated according to age; and there can be no doubt as to the unfairness of endeavouring to make up the deficiency in the amount of contribution paid by the older members by admitting younger men for that purpose, since the younger men will require increased assistance in consequence of increased sickness as they in turn become older—to afford which the present surplus of their contributions should be reserved.

There is much more that is useful in the vol.

Mr. Arthur Scratchley pub. : *Treatise on Life Assu. Sos. and F. Sos.; with an Exposition of the True Law of Sickness, and Rules and Tables for F. Sos.*

There was also pub. : *West Riding Provident So.; Proposed Scheme* [by Col. Ackroyd].

There was founded this year in Liverpool another *Burial So.*, known as the *Protective or Liverpool Protective*. The man. of the So. has been very lax; and there have been some serious internal disturbances, regarding collectors' commissions, etc.

In 1870 the So. had about 42,700 members; the income was about £10,145; and the cost of man. £3730, or about 36½ p.c.

In 1872 the members were said to have reached 48,132; and the accumulated fund to stand at £16,978.

France.—From a Rep. made to the Emperor by the Superior Commission for the Encouragement and Supervision of *F. Sos.* in *France*, this year, we obtain the following particulars :

At the close of 1855 there were 3123 *F. Sos.* Of these 1063 were *Sociétés Approuvées*, and 2060 *Sociétés Privées* [the difference being *approved* and *allowed*—equivalent to our

regis. and *non-regis.* sos.]. These comprised 386,562 members, of which 41,434 were hon., and 345,128 participating—which showed an increase of 163 Sos., with 35,461 members during the year.

The receipts from contributions of members in F. Sos. in 1855 were £246,804; the benefits or payments to members were £197,031—excess of receipts £49,773. The accumulated funds of the Sos. reached £583,133.

The number of *Female* members in F. Sos. at the close of 1855 was found to be 41,736. Some Sos. were composed wholly of females; and these managed their own affairs generally without external aid, and without Gov. or Departmental subsidy. Special investigation into the Female Sos. showed that on an average they consisted of upwards of 100 members. Most of these Sos. made an allowance to their members during sickness, in the same manner as the Sos. of Males. The number of *days' sickness paid for* in 1855 was 5·82 days p. member—being three-tenths less than in the F. Sos. for France generally. The number of members sick was 20 p.c.; the average for the whole of France being 29½ p.c. The sickness had an average duration of 26 days p. sick person—the average for France being about 20 days. The mort. of members was 2½ p.c.; and 13 p.c. on the number sick.

In 1852 the F. Sos. were put upon a new footing, under what is known as the Organic Decree, promulgated 26 March. One of the requirements of this Decree was that the Sos. were to be subject to revision at the end of each 5 years from that date. Another result was that far more complete statistical records of F. Sos. than previously began to be kept. From these we learn the following general details:

At the end of the year 1852 the total number of Sos. was	2438
" " 1853 "	2773
" " 1854 "	2940
" " 1855 "	3123
" " 1856 "	3404

Between 1852 and the close of 1856 more than 200 of the *Allowed* Sos. had ceased to exist, and had been almost all replaced by *Approved* Sos.; which brought the number of Sos. formed since the Decree of 1852 to about 1200.

The total number of members in the F. Sos. of France:

On the 31 Dec., 1852 was 271,077, of which 21,635 were honorary

" 1853 "	318,256	" 28,810 "
" 1854 "	351,101	" 35,300 "
" 1855 "	386,662	" 41,434 "
" 1856 "	426,453	" 47,281 "

The introduction of *Hon. Members*, scarcely known in the Old Sos., was almost entirely due to the encouragement given by the Decree of 1852. The number had more than doubled in 5 years.

The reserved funds amounted on 31 Dec. 1852 to £428,595

" " "	1853 "	483,582
" " "	1854 "	533,283
" " "	1855 "	599,124
" " "	1856 "	661,292

Great progress had also been made during the same period in the numbers of *Female* members. Thus:

At the end of 1852 the total female members was 26,181

" 1853 "	33,482
" 1854 "	36,332
" 1855 "	41,736
" 1856 "	47,982

The Rep. of the Commission, 1857, says hereon:

We are happy to be able to say that experience has not justified the objection, so often repeated, that the *female members* would soon exhaust the funds, because their days of sickness are much more numerous than those experienced by the men. Statistics demonstrate that the *proportion of days of sickness is almost everywhere the same for both sexes*. Slight indispositions are more common to the females; but the chance of accident is much greater with the men—and thus, in fact, there is almost always a compensation.

If in some places the admission of females has caused a slight extra expense, the Sos., true to the charitable spirit on which they are founded, have supported, without complaining, this little add. to their expenses, and, at a small sacrifice, a most important principle has been maintained.

From the preceding figures it is seen that the total number of F. Sos. in France had increased in 5 years 40 p.c.; the total number of members 57 p.c.; and the total of the reserved, or accumulated funds, 54 p.c. The Rep. of the Commission says hereon:

From these figures it is easy to perceive that the progress of F. Sos. has not diminished in the slightest degree: nothing has been able to retard it; neither the dearth of provisions, nor the cholera, nor the war. It would appear to be the regular fulfilment of a law independent of external vicissitudes, and which instils forethought into the minds of the labouring pop., without being interrupted in its course by the scourge which might be expected to obstruct it.

On the occasion of the birth of the Prince Imperial, on the 16th of March this year (1856), the Emperor made a grant of 500,000 fr.—£20,000—to F. Sos. This was distributed to the members of the *Approved* Sos. at the rate of 3s. 4d. p. member. A

further sum of £8000 was granted in view of the estab. of Pension Funds, for the infirm and incurable members of F. Sos.

The number of members of these classes in the F. Sos. of France on 31 Dec. 1852, was 3443; same date 1853, 3723; 1854, 3342; and in 1855, 4463. But the Rep. shows the same variable and uncertain mode of dealing with these in *France* as in *Eng.*—thus:

Many Old Sos. [those founded before 1852] designate as infirm or incurable those members who continue to be sick after a certain period—6 months, 9 months, or a year, according to the rules. The greater number of these individuals, however, are far from being really infirm or incurable: but by the simple fact of the continuance of their sickness they are assimilated with the infirm and the incurables in the true and complete acceptance of the word; and, like them, only receive a very small allowance. It results therefore that the persons described as pensioners are of two sorts—the first consisting of real pensioners, old, infirm, and incurable persons, who receive a small allowance, either fixed and constant, or depending on the state of the funds, to the end of their days; the second consists of members who are treated in a pecuniary point of view the same as the preceding, because they are temporarily assimilated to them. The variations of the first series being governed by the deaths, and by the arrival of the members at the period of retirement, may be stated beforehand correctly enough from the T. of the ages of the members; but the variations of the second series, being a consequence of the number and duration of the diseases reputed to be chronic, cannot be anticipated. It is impossible therefore to deduce any precise results from the T. in this respect. The confusion will continue until the Sos. are obliged to give a more circumstantial account of these two series of pensioners.

A Decree of 26 April, 1856, appears to have been specially directed to the placing of the Pension Funds of F. Sos. upon a proper footing. One of the modes to be adopted was to transfer any portion of the reserved funds, beyond that likely to be required for sickness and ordinary purposes, to the formation of a Pension Fund—this being supplemented by the contributions of hon. members and by Gov. grants. The £20,000 bounty fund on the birth of the Prince Imperial appears to have been applied in this manner. The Rep. of 1857 recurs to the question:

During the 5 years no question has been more debated, or made greater progress, than that of superannuation funds. *This at last appears to have been brought to a solution, which appears to satisfy all the requirements of the problem.*

Pension Funds, which are one of the principal attractions of F. Sos., rested in the Old Sos. on the most uncertain basis, on the most erroneous calculations, and the most imaginary experiences. They figured in the rules as matter of right, and prepared the members for the most doleful dissatisfaction, or the So. for inevitable ruin. The Decree substituted for this illusory obligation the simple power of taking from the Reserved Fund, and especially from the subs. of honorary members, a portion destined to assist the old and infirm.

The law granted to the *Approved* Sos. the right to place this portion of their disposable funds at the *Caisse Général de Retraites*, which is far more advantageous than in the Provincial Caisse (or Bank), on account that it has the powerful organization of the State: its solid guarantee, and its gratuitous administration. Some Sos., entering on this course, shared, at the end of each year, the disposable portion of their reserved fund among all the members in the shape of deposit books on the Caisse (or Bank). But the share of each one was so small, at the end of 20 or 30 years it produced so little int., that it did not appear sufficiently attractive to encourage the member to increase his future pension by investments of his own. . . . It remained, then, to find a plan which would permit the So. to grant pensions to its aged and infirm members, at the same time assuring the return of the cap. destined for the pension, and making of it one more tie between the member and the So.

The organization of the Pension Funds has fulfilled all these conditions. A special account has been opened by the "*Caisse des Dépôts et Consignations*" in the name of each So., which pays in such sums as can be spared without danger from the Reserved Fund, and the int. of these moneys is distributed in the shape of annu. among the aged members, chosen by a gen. meeting from those who are above 50 years of age, and have been at least 10 years in the So. At their death the cap. of the pensions returns to the So. to be used again in the same manner by other members, who fulfil the same conditions.

At the close of 1856 some 1022 Sos. had opened such accounts for Pension Funds: 870 of these, which had voted within a specified time a deduction from their Reserved Funds, had been awarded a special share in a State subvention of £12,000. The total sum voted by the Sos. up to this date was nearly £24,000; and that of the investments made in the Caisse des Dépôts to 30 June was £22,455. This, supplemented by £31,260 Gov. grants, and int. to 31 Dec., brought the total Pension Funds up to £54,315. There were 40 pensions payable in 1857, the amount of which varied from 25s. to £5.

The paternal character of the Commission is seen in the following passages of the Rep.:

The Commission hopes that while administering the Gov. grant with prudence and economy by only giving assistance to those Sos. which have got into debt by reason of epidemics or exceptional circumstances, it will be able each year to find sufficient sums to encourage and facilitate the efforts made by these Sos. for the benefit of the sick and infirm. The future can only improve (upon) the present state of affairs. Already many Sos. have acquired, by the generosity of their hon. members, and the good administration of their funds, a reserve capable of supporting all the expenses which may arise from an extraordinary proportion of sickness or deaths. By reason of this prosperity, the subs. of the hon. members, and the assistance of the State, would appear to be useless; but now all these sums find their proper place in the Pension Funds. The creation of Pension Funds renders the assistance of hon. members to F. Sos. indispensable. Who is the truly generous man that would desire to abandon the inst. at the moment when he can render it the greatest service, in assuring to the aged that repose and comfort of which they are in need? . . .

The Commission, in making use of the Gov. grants, has followed the course which the true interests of these Sos. pointed out. It commenced by assisting the formation of those founded in virtue of the Decree of 1852; and at the present time every So. which is approved receives assistance towards the expenses of its estab. Afterwards sums are granted from the subsidy in order to increase the reserved funds so as to render them sufficient for any extraordinary calls made by the sick. It is by these means that all the Sos. visited by the cholera, or by exceptional calamities, have received immediate and efficacious assistance.

It seems that the Departments and Communes have also rendered assistance in the formation and development of F. Sos.; but the accounts cannot be ascertained with pre-

cision. We are glad to observe that the Superior Commission is beginning to see some of the objections to a reliance upon State aid. Thus :

It is disposed to encourage every commencement; to assist all those wanting support; but it is obliged to resist the tendency which impels the richer Sos. to address themselves to the Gov. every year to increase their reserved funds, and to add to their savings. The Approved Sos. ought to guard against this tendency, because the habit of having recourse to the Gov. subsidy would become an argument against the approval itself, and the inst. must not lose its mutual character and take that of official liberality!

In attempting to bring the "Old Sos." into the approved class, the Commission has experienced much such difficulties as have those who have sought in this country to bring the unregis. Sos. within the scope of registration :

The Commission has met with two objections in its efforts to bring the Old Sos. under the approval of the authorities. The first is raised by the compulsory investment of the funds of the So. with the Gov. A certain number of these Sos. still prefer to invest with private persons engaged in commerce or manufactures. They do not see that in accepting their funds the State gives the most serious guarantee for the deposit. Domestic vicissitudes and commercial catastrophes daily bring ruin to those who trust the credit of individuals. The State has betrayed no person's confidence; even the revolutions of later years have been powerless in making it fail in its engagements. . . .

It is also made a subject of reproach to the Approved Sos., that they abandon the administration of their funds and the direction of their affairs in admitting hon. members to their councils, and especially in giving up the nomination of their President. The experience of these 5 years gives a triumphant answer to this reproach. Nowhere have the hon. members taken any part in the affairs, except to introduce more regularity in the man.; more order in the accounts; or more exactness in carrying out the rules. Too often in the Allowed Sos., where the habits of bus., and also leisure, are wanting, the man. and carrying on of the So. are delivered into the hands of a paid servant, who becomes the absolute master of it. In the Approved Sos. the information and bus. habits of the hon. members, seconded by the good sense and good instincts of the workmen, are useful in settling questions, in solving difficulties, and in taking the initiative in practical improvements. Lastly, all propositions being admitted to discussion and to the votes of gen. meetings, the So. itself pronounces its judgment while comprehending the subject discussed.

Finally there follows a list of the names of 161 persons who had been rewarded by the Emperor (in one year) for their services to F. Sos., viz. 2 made Knights of the Legion of Honour; 20 rewarded with gold medals; 35 with silver medals; 77 with bronze medals; and 27 with honourable mention. In the United Kingdom serving the State in its best interests, viz. in regard to its social advancement, but rarely meets even with passing acknowledgment. State honours are reserved for State pensioners!

[The preceding should be read as supplemental to sub-heading *Friendly Sos.* under art. FRANCE.]

Bavaria.—In this country F. Sos. have existed for a long period; but they are chiefly found among the manufacturing pop. The asso. comprise in their objects relief in sickness, allowance for burial, and mutual support in various cases.

A Rep. by the Baron de Cetto states that during this year (1856) a searching inquiry was made by order of the King as to the state of the inst. of this class, and the results were made available. It is thus shown that there were 119 Relief Sos. and Savings Banks existing among the various industrial manufactories through the 8 administrative centres of the kingdom. The funds of these are derived from contributions paid by the working people, and gifts from owners and masters; also assistance from the Governors of the administrative districts, regulated by the wants of the Sos., which it is thereby seen are not entirely self-supporting.

In some of the cities there appear to be Asso. more after the manner of Provident Inst. Thus in *Munich* there was the *Maximilian's Jubilee So.*, for the relief of the widows and children of deceased members. In the suburb of *Au* there was a So. for the relief of sick musicians, who have a weekly allowance during sickness. At *Tegernsee* there was a So. for the mut. relief of the members in case of accident in wood cutting, or other forest work, with the head Forester as president. In the *Gunzenhausen* District there was a similar So. with 510 members. At *Kaiserlautern* there were several F. Sos., viz. the So. of Napoleon's veterans for the relief of the sick and poor members, and for providing burial expenses; the Working-man's Union, No. 1 and No. 2; the Locksmiths and Joiners Union for Burials only; the Smiths and Cartwrights Union; the Labourers Union; the Sickness and Death F. So.; the Citizens Union; the Shoemakers Union; the Tailors Union; the Artizans Union. Most of these had but a small number of members, very rarely exceeding 100, and frequently under 50. At *Nuremberg* there was a species of co-operative So., which received from the members in the 30 weeks of summer following 30 April certain proportions of their daily earnings, and the sum so saved was given out in winter in the shape of wood, turf, or potatoes.

There appears to exist in *Bavaria* a species of general Relief Asso. extending to those who are not members of the Trade F. Sos.—viz. the *So. of St. John*. Its primary object appears to be to encourage the formation of Provident Asso.; but it also extends its operations to the education of orphan children, the estab. of industrial schools, baths and washhouses for the poor, sos. for the suppression of begging, soup kitchens, maternal charities, etc. Again, its operations extend to affording relief in certain districts which suffer from the inferior quality of the land; and it distributes seed, potatoes, and other aid in view of cultivation; again, it affords relief in case of loss by fire among the poor, and in case of visitations of cholera, etc.

1857.—The 2nd Ann. Rep. of the Registrar of F. Sos. brought the information

regarding them down to the close of 1856: and therefrom we learn that no less than 26,000 F. Sos. had been estab. in E. and W. between 1793 and this date. In *Scotland* there had been about 700 regis. in the same period. The Registrar says:

It is well known that almost every village and hamlet in E. and W. has its F. So., while the towns and cities have them by hundreds. *The correct number of these has hitherto been, and still is, unattainable: because it must be remembered that in these pages reference is made only to the Sos. which have placed themselves under the protection of the law; and while it is optional with them to avail themselves of this privilege or not, the precise number cannot be known.* There is no doubt, however, that there are more F. Sos. for mut. relief in sickness in E. and W. than in the whole of the rest of Europe or elsewhere; . . . and no subsidy or aid from the State has been granted to them, as has been done in the case of F. Sos. on the Continent.

In support of this view it was found about this date that in *France* only about 1 person in 76 belonged to F. Sos.; in *Belgium* 1 in 64; while in *England* the proportion was 1 in 9. (See 1861.)

The F. Sos. of E. and W. were believed to possess accumulated funds of nearly 20 millions stg.; while the relief afforded to their members approximated to, if it did not exceed £2,000,000 p.a.

In this vol. was contained much valuable information regarding F. Sos. in various Continental countries, of which we have already made use in this art.

In *Spain* generally there was believed to be but few F. Sos.; but in *Barcelona* the industrial operatives mostly belonged to such Sos. formed among the different trades. In *Poland* there were no F. Sos.; but steps in that direction were about being taken. In *Sardinia* there were charitable inst., but no F. Sos. From the *United States* no information could be obtained. (See 1869.)

Mr. F. G. P. Neison pub.: *Contributions to V. Statis.: being a Development of the Rate of Mort. and the Laws of Sickness from orig. and extensive Data; with an Inquiry into the Influence of Locality, Occupations and Habits of Life on Health; an Analytical View of Railway Accidents; and an Investigation into the Progress of Crime in E. and W.* This is usually regarded as a 3rd ed. of the work of 1845, already fully reviewed, which indeed it is, and much more. The main points will be reviewed under HEALTH, LOCALITY, OCCUPATION, SICKNESS, etc.

Mr. John A. Higham contributed to the *Assu. Mag.* [vol. vii. p. 112] a letter: *On Mr. Alexander Glen Finlaison's T. for Allowances in Sickness.*

Austria.—There are not many details available regarding F. Sos. here. During this year the following particulars were furnished by Baron Charles Czoering, Director of Administrative Statistics at Vienna; but the figures only apply to *Austria* proper, and do not include Hungary.

The F. Sos. in that country, under strict definition, only embrace two classes—1. For mutual succour in case of death (*Leichenvereine*)—being equivalent to our Burial Sos. 2. F. Sos. affording relief in case of sickness (*Krankenunterstützungsvereine*)—Sickness-Relief-Sos., but mostly including death benefit. The total number of Sos. of the two classes was 90—viz. 30 Burial Sos.; 58 Sickness and Burial Sos.; and 2 Sickness only.

These appear to have been limited very much to particular trades or callings. Thus in *Vienna* there was a Burial So. for citizens; another for joiners; and another for master tradesmen; two for the City military; one for Court book-keepers. A Burial and Sickness So. for artists; another for livery servants; and a third for hired servants. In *Vienna* New Town there was a Burial So. for gardeners. In *Schneerbat* there was a Burial So. for journeymen, and another for weavers; in *Krems* a Burial So. for veterans; in *Allartsteig* a Burial So. for shoemakers, another for weavers, and a third for tailors; in *Sechshaus*, two Sickness and Burial Sos. for military who have left the service. The remaining 71 were general, not excluding any class of the pop.

But it was stated that in add. to these Sos. the workmen in almost every industrial, as well as in all the mining estab. *without exception*, have Sos. for mut. assistance in case of death and of sickness, as well as incapacity to work; and for granting pensions to widows and orphans. There are also superannuation funds, and pension funds for widows and orphans. Of these there are no official statistics.

It is clear, however, that in *Austria* F. Sos. are much more extended than would appear from the simple official statistics.

1858.—There was enacted the 21 & 22 Vict. c. 101—*An Act to Amend the Act of the 18 & 19 of H. present M., c. 63, relating to F. Sos.*—wherein no new principle was brought into play, except that a F. So. might, on the approval of the Registrar in writing, change its name (sec. 4); and in case of dissolution of a So., the Registrar of F. Sos., or a duly-qualified actuary, might devise a scheme for distribution of funds (8). In respect of sums payable on death of children for funeral allowance, the certificate of regis. of deaths was abolished in favour of a certificate of a duly-qualified medical practitioner, "stating the prob. cause of the death of such child" (2). This Act to be read as one with the Act of 1855.

There was enacted the 22 & 23 Vict. c. 40—*An Act for the Estab. of a Reserve Volunteer Force of Seamen, and for the Gov. of the same*—which declares (sec. 23) that no man by entering as a Volunteer under this Act shall lose his interest in a F. So.

The 3rd Ann. Rep. of the Regis. of F. Sos. was pub. this year. During 1857 the rules

and alteration of rules of 1889 F. Sos. had been regis. "Some few cases arose where a certificate was refused in consequence of the objects proposed in the rules not being in conformity with law." A new object had been approved by the Sec. of State (under authority of Act of 1855), viz. for "Relief of the members in case of shipwreck, or loss or damage to boats and nets."

At the close of 1857 the Registrar had sent out the forms of Ann. Returns required to be filled up and transmitted to him under the 45th sec. of the Act of 1855, and he remarks thereon:

In consequence of the facilities afforded by having a complete regis. of all the F. Sos. established according to law since the year 1793, the Registrar was enabled by the end of Dec. 1857 to send by post 22,500 forms of Ann. Returns. . . . It must not, however, be supposed that that number represents the number of Sos. in existence, as it only shows the number of Sos. in the regis., of which no account could heretofore be given, except that they had been enrolled or certified. A large number of Returns (about 2000) were received by post, with various notices written on the envelopes, stating that the So. was dissolved, or had removed, etc. The notices were entered in the regis., and thus far it has been cleared of many useless entries; but the required information is not yet complete, as in many cases there is little doubt that although the So. is dissolved or removed, the return paper was retained, and no information forwarded. Every year, however, will, by the adoption of this practice, render the regis. more accurate as regards the existing Sos.

By the end of March, 1858, no less than 5040 Returns of the condition of the respective Sos. during the preceding year had been received, and Returns have since been coming in daily, up to the time of going to press. This number, therefore, is as fallacious as the number of Returns sent out, mentioned above, as showing the number of Sos. in existence—as it must be borne in mind that the sending a Return is a voluntary act, and its omission is attended with no penalty or disability; and when it is considered that the great majority of the secs. of these Sos. are working men, with merely the rudiments of education: and the filling up of a "form" however simple is no light matter with them, the number sent up to the end of March is as large as could be expected. There is little doubt, however, that in future years the number of Returns received will be increased to one more commensurate with the number of F. Sos.

As the Returns were received they were examined with reference to the items of expenditure, "and it was found that a constantly recurring item was for drinking and feasting." The Registrar sent a letter drawing attention to the objectionable items in each case, and stating that such expenditure was not in conformity with the Acts now in force. "About 500 of these letters were forwarded to the respective Sos., and from the replies received it appears that in most instances a meeting of the members was called, and after the subject had been discussed, the necessary reforms were made. The tenor of the letters received by the Regis. with reference thereto show that the majority of the members were thankful for having had their attention called to the subject."—p. 5.

Another point to which attention was drawn in the examination of the Returns was the *Investment of the Funds*. It was found that a large amount of money was invested in the hands of the Sos. treasurers, of Private Bankers, of Brewers and Manufacturers, on notes of hand; in Building Sos., in Loan Sos., and in various other similar investments. "The extent to which these investments are made is much greater than might have been expected. In the pub. accounts of an estate, where the partners carried on bus. as Bankers, Tanners, Shoe Manufacturers, and Brewers, and which was in the Bankruptcy Court during the present year, it was stated that the unsecured creditors included the following F. Sos." Then a list of 36 Sos. is given, mostly in the neighbourhood of *Kettering* (Northamptonshire). The Registrar adds: "At the meeting of the creditors of a large firm of brewers [Messrs. Calverts?], which also took place during the present year, it was stated that no less than 44 Sos. had their funds invested with this firm; and the same has happened with several late bankruptcies. In these and similar instances F. Sos. take their share with the general creditors, and have not the preference they would have had if the investments had been in accordance with the Act." The Registrar accordingly drew the attention of some 700 Sos. to this fact, and much good must have resulted.

Another point upon which the Registrar sought information was the length of time which the Sos. had been in operation, i.e. their individual age; and he remarks hereon: "As this point is so easy to determine, it is strange that only 3073 Sos. responded to the request, and gave the information required." Of these, 20 were stated to have been in existence over a century; 23 over 90 years, 20 over 80, 41 over 70, 46 over 60, 100 over 50, 129 over 40, 301 over 30, 721 over 20, 1187 over 10, and 485 under 10. The Registrar says hereon:

If the same proportions hold good for those Sos. which have not given any information on this point, it follows that more than 10 p.c. of the F. Sos. have been estab. about 40 years; and as in my last Rep. (p. 14) it was shown that about 32 years is, in general, a sufficient length of time for a So. to arrive at its maximum liability, it would seem that about 10 p.c. of the existing Sos. are in a condition of having passed safely this maximum point, and to be now firmly estab., with the results of their own experience as a test for the future.

Against this reasoning it may be sufficient to quote the case of the *Essex Provident So.* (1818), and some others which have been kept in existence almost solely by the aid of the contributions of the younger members.

The Rep. proceeds to give some valuable details regarding the *Burial Sos.* of E. & W. These we shall speak of under date 1874.

After eliminating from the returns all those exclusively relating to Burial Sos., Annuity, Endowment, and Provident Sos., there still remained 4759 F. Sos. proper regarding which many details of interest are furnished. It appeared that on an average these Sos. consisted of about 100 ordinary members, and about 1½ hon. members to each So. They

possessed on an average funds of about £450—being £4 10s. p. member. "Among the returns received there are many from Sos. which clearly show evidence of prosperity and undoubted solvency."

Referring to the F. Sos. of England generally, the Registrar was of opinion that the number of F. Sos. "enrolled and certified and now in existence in E. & W." was about 20,000; the total number of their members was about 2,000,000; that the ann. sum expended in sick relief was about £1,000,000; that their aggregate funds reached about £9,000,000; of which about £1,431,543 was invested (by 9133 Sos.) in Eng. and Welsh savings banks; and about £1,944,991 was invested (by 560 Sos.) with the Commissioners for the Reduction of the National Debt.

The returns received included three of the large Orders, viz. the Manchester Unity of Odd Fellows, with 276,254 members; the Ancient Order of Foresters, with 135,000 members; and the Grand United Order of Odd Fellows with 37,000 members.

Dividing Sos.—The Registrar passes on to speak of that class of F. Sos. which earlier in this art. we have called *Dividing Sos.*; but which, as we shall see, are also known by other designations. His remarks are worthy of careful consideration:

There is one class of Sos. which is rarely or never heard of except in the largest towns and cities of the kingdom, called indifferently *Sharing*, *Dividend*, *Birmingham*, and sometimes *Tontine* Sos.—to which the Registrar feels bound to direct attention, as being founded on a principle of which failure is the necessary consequence. Their peculiarity is to share the funds every year down to about 2s. 6d. p. member: thus destroying the very foundation of a F. So., which is not to provide daily for the daily needs of the members in sickness, but to provide in the years of youth and strength for the increased sickness and weakness of maturity and old age. The reason that these Sos. are only found in extremely populous places would seem to be that the experience bought by their repeated failures is lost upon the masses, and there is always a sufficient number of persons willing to try the experiment again; but in places where the pop. is not so great, the failures are more generally known, and are not so soon forgotten. It may readily be supposed that it would be very difficult to start a So. for the tenth time in a place in which it had already failed on 9 trials; and this would be the case in a country town. But in consequence of the density of the masses in thickly populated places, it is easily accomplished in such towns as *London*, *Birmingham*, and *Manchester*, etc. There is nothing illegal, although there is much that is imprudent in the constitution of these Sos.: which are, when legally estab., entitled to the protection afforded by the F. Sos. Acts; and the Regis. has during the last 12 months certified 24 in *Liverpool* alone; but he feels it his duty to direct attention to their faulty constitution.

This class of Sos. has proved very attractive on account of the supposed benefit received in the shape of a few shillings yearly. But the sum each man receives as a dividend is always too small to be of any real benefit to him, even if well applied; yet this small sum being paid to every member is, in the aggregate, sufficient to destroy the So. While the members remain young, such Sos. are supposed to be in a prosperous condition; but when the sickness commences to be heavy; when the members are getting old; when no young ones will enter to keep it up; then insolvency teaches the members that they spend the money when young, which should have been put by for their old age. No *Birmingham*, *Dividend*, or *Tontine*, or other So. where the money is shared yearly, is likely to be permanent. . . .

The Registrar further states that during the preceding 20 years about 50 of these *Dividing Sos.* had been founded in Lond.; that he had sent messengers to the meeting places of those Sos., and that only 12 of them were found to be in existence. From the bal.-sheet of one of the Sos., which had been in existence 13 years, and then had 117 members, it was shown that 114 of such members had in the preceding year received a dividend of 1s. 4d. p. month, or 16s. p.a.; and the others at a like rate for less periods than a year. The total receipts during 12 years had been £1771; the total dividends paid £1009. The So. had a balance of £14 odd in hand, or about 2s. 6d. p. member. The bal. had been expended in sickness and death claims, and expenses of man.

The Rep. finally reverts to the subject of the *winding-up* of F. Sos., which had been brought within the province of the Registrar by the Act of this year. He had been frequently consulted; and two rather remarkable instances had been before him in the preceding year.

The first of these was the case of the *London District Assistants' Pension and Widow and Orphan's Annu. So.* This So. was originally estab. to provide a superannuation allowance for Postmen employed in the London District of the Gen. Post Office, in add. to that paid by the Department. This fund was raised partly by subs. of members, but mostly by contributions of the public collected by postmen on their respective walks. This state of things continued for some years, and the So. had several annuitants on the funds with a considerable sum in hand. At this period, however, the Gov. consented to grant the postmen an add. allowance which brought the superannuation up to about the amount to which the contributions and donations had heretofore raised it; but with this arrangement an Order was issued forbidding the collection of any more donations from the public on account of the So. The state of things which called the So. into existence having thus passed away, it was resolved to wind it up. The Registrar devised a mode of winding it up by which the rights of the then annuitants, as also of the expectant annuitants, and all other parties, were equitably dealt with; and the affair was closed without any expense or delay.

The other case was of a different character. It was that of the *Mutual Benefit So.*, which had been estab. in Lond. in 1820 under high patronage, and with T. prepared and certified by Messrs. W. Morgan and Friend. This So. had continued to transact what was supposed to be a good bus. for 40 years. It had several branches in the country,

and in the whole about 1000 members. At the time the Registrar was consulted it was stated that for years the payments on account of sickness had exceeded the contribution on account thereof. The deficiency at length exceeded £6612, which sum together with £1314 on management account had been taken out of the prems. received in respect of annu., endowment, and life ins. The funds remaining in hand only amounted to £2300. To carry on the Asso. appeared hopeless; and finally during this year it stopped payment; the consequences to many of the older members being most disastrous. [MUTUAL BENEFIT SO.]

There was founded the *Workman's Institute*. It provides in various districts of the metropolis reading-rooms well supplied with newspapers and periodicals, at a very moderate charge, and houses of call for men who are out of work. To each branch of the Inst. is attached a *Benefit Club*, specially limited to the wants of workmen and labourers generally. They are managed by committees of workmen elected by their own body, and the meetings are held at the Inst. free of expense. The payments for benefits are graduated according to age; and the expenses are kept distinct. There are no entrance fees or levies; and trustees of known position are selected; the rules are to be certified and enrolled. In one of the clubs, consisting of 200 members (in 1860), the advantages offered were: 1. Relief in sickness to the age of 65. 2. Superannuation allowance, or old age pay, of 5s. p. week after 65 for life. 3. Medical attendance and medicine. 4. Endowments for children. 5. A sum of money at death. 6. A provision not exceeding £30 a year by deferred annu. for life from the age of 65. The subs. of hon. members are carried to a guarantee fund to be applied in case of accidents and special emergencies.

Belgium.—The F. Sos. Commission of this country issued *Rapport sur les Comptes de l'année 1859*, wherein it appeared that the necessity of obtaining national statistics of F. Sos. had become apparent there. The following extracts taken from this document furnish a fitting sequel to the outline given under 1852:

... The essential condition of the prosperity and stability of F. Sos. consists in the possibility of calculating with exactness the amount of contributions to be paid by members to insure the benefits promised to them.

It is requisite that an equilibrium be estab. between the receipts and expenditure, not only for some time or some years, but for the whole duration of the So. So that either it may be perpetuated by the add. of new members, or, failing new accessions, it may be destined to come to an end with the existence of those of whom it is composed.

Hence is perceived the necessity of scientifically investigating the average duration of human life, and the prob. of sickness according to age and occupation.

In England the solution of this problem was entered upon at an early period. The T. which have been recently adopted [Mr. A. G. Finlaison's] are entitled to great confidence. . . .

It may surprise some that we do not adopt the English T.; but experience has proved that health, like longevity, varies according to nation, occupation, and manner of living. Thus while in Eng. the law of sickness during a period of 32 years from the ages of 18 to 50 is 8'12 days p.a. for each person; the French returns give 5'69 days. Our average is 6'81 days; but this is not reliable, because it is not yet based upon a sufficiently large experience.

The Rep. refers to the "dividing system," which had been introduced into Belgium, and condemns it. It also laments that the F. Sos. of the kingdom had not fully appreciated the legal protection intended to be afforded to them by the laws in operation.

Mr. Samuel Thomas Davis pub. at Witham (Essex): *Odd Fellowship; its Hist., Constitution, Principles, and Finances*. A very well written and instructive lecture.

1859.—From the 4th Rep. of the Registrar of F. Sos., pub. this year, it appears that the number of F. Sos. which had been enrolled from the passing of the Act of 1793 down to the end of this year was 28,550, of which 6850 had ceased to exist at this date. Probably the enrolments embraced many Sos. whose rules had been enrolled on more than one occasion. During 1858 no less than 2165 Sos. had their rules and alterations of rules submitted for regis. Notices of 58 dissolutions of F. Sos. had been received by him up to the end of 1858, "and since that time the number had considerably increased." The number of forms of ann. returns sent out in 1858 was 20,700; of which 6000 were returned filled up; but of these 1400 were so imperfect that they were not available for the purposes of abstract.

Mr. Charles Hardwick pub.: *The Hist., Present Position, and Social Importance of F. Sos.; including Odd Fellowship and other Affiliated Provident Inst., of the Working Classes: comprising the Gradual Development of the Science termed "Vital Statistics"; a Popular Exposition of the Financial Laws necessary to ensure Future Stability, and the Method of Ascertaining the True Value of the Assets and Liabilities; a Refutation of several Popular Objections; Suggestions for the Equitable Adjustment of Past Error, and for Future Development and Expansion*. 2nd ed. 1869, "revised."

There was this year founded the *North London Railway Prov. So.*, Bow. In 1875 the members were said to be 486, and the accumulated funds £2131.

Hanover.—The Statistical Department of the State caused to be prepared an extended Rep. upon the F. Sos. of this kingdom. These numbered in all 875 Sos., and some of them had been estab. as early as the middle of the last century. They were spread somewhat unevenly over the seven Districts (*Land-drostebezirk*) of the kingdom—the greatest number being in *Lüneburg*. These Sos. were mostly estab. for

the purpose of paying a sum at death; but many of them included amongst their benefits relief in sickness, while some included support for widows and orphans, loans, etc.

Among the Sos. in the Hanover District was one for the widows of officers, and another for the widows of non-commissioned officers of the Royal Army; a third for the widows of preachers; a fourth for those of schoolmasters; a fifth for those of medical men; a sixth for tax-collectors; and a seventh for telegraphic and railway employes. There was one for carpenters, another for saddlers, and a third for ins. against damage by hail, etc. Several of these Sos. had been estab. under the patronage of sovereigns of this country—Princes of the House of Hanover; and their certificates set forth the royal titles even more profusely than those in this country. Other Sos. were merely certified by the Chief of the Department of Police, or by the Chief Magistrate of the District; representing the approval of the Justices, as was the case with F. Sos. formed in this country prior to 1829.

In the *Hildesheim* District there was a So. for the support of mechanics travelling in search of employment (*zur unterstützung bedürftiger wandernder Handwerksgelesen*); also Cow Clubs—which appear to be numerous in the District. In the *Lüneburg* District there was a So. for providing for the widows of advocates; a Rifle Corps Club; Clubs for Mut. Assu. of Horses, Pigs, and Cows; Military Substitute Sos.; Burial Sos., Sick Clubs, etc. In the *Stade* District there was a Rifle Corps Club, with a Burial So. added to it; and there were also several Mut. Sos. for providing against loss of Ships, Boats, Tackle, etc. In the *Osnabrück* District the F. Sos. were only of the ordinary class. In *Aurich* there were several for the benefit of widows and orphans of sailors; also Loan Sos.; numerous Sos. for Marine Ins., Cow Clubs and Mut. Fire Ins. Sos. In *Clausthal* District the ordinary F. Sos. and also Savings Banks were numerous.

It was rendered clear by this Rep. that *Hanover* was as well supplied with F. Sos. as any country on the Continent of Europe; and much better than most of them.

1860.—There were 3 new enactments this year relating to F. Sos., viz.

1. The 23 Vict. c. 13—*An Act to prevent the members of Benefit Sos. from forfeiting their interest therein by being enrolled in Yeomanry or Volunteer Corps*—which recites:

Whereas the rules and regulations of many Benefit Sos. provide that any member who shall enter himself into the Queen's service by sea or land shall be excluded from such So.; and whereas a doubt has arisen whether such a provision applies to members who enrol themselves in Yeomanry or Volunteer Corps: and whereas it is expedient to put an end to that doubt, etc.

And it is then enacted that members of Benefit Sos. shall not incur forfeiture by enrolment as volunteers. In case of disputes arising, the same to be referred to Justices of the Peace, pursuant to the provisions of the Acts in force relating to F. Sos.

2. The 23 & 24 Vict. c. 58, an amending Act. The provisions related mainly to dissolution of F. Sos.; and the Ann. Returns. As to dissolution, it was no longer to be necessary to state in the agreement (as under the Act of 1855) the intended division of funds; but the same might be generally referred to award of the Registrar of F. Sos. (sec. 1). The Gen.-Reg. award was to be final, without appeal (2). But particulars of awards to be pub. in his next Ann. Rep. (4). Penalty not exceeding 20s. and costs imposed for not making Ann. Return to the Registrar pursuant to the Act of 1855.

3. The 23 & 24 Vict. c. 137—*An Act to make further provision with respect to moneys received from Savings Banks and F. Sos.*—under which the Commissioners for the Reduction of the National Debt were authorized to invest the money of F. Sos. in other Parl. securities (1). An annual report was to be made to Parl. of such investments.

The [5th] Ann. Rep. of the Regis. of F. Sos., pub. this year, contained many matters of interest. There was a full translation of the rules of the *Walsrode (in Hanover) Rifle Corps and Burial So.*; but the chief features of the Rep. were the details of the attempts of various *Trade Sos.* to regis. under the F. Sos. Acts. Here is an example: "The United Broad Silk Weavers So., at the Joiners Arms, Paradise Street, Macclesfield," submitted its rules for regis.—the 6th rule contained the following:

The weavers of each firm, inside and outside, shall form a committee of not less than 5 persons, whose duties shall be to set the price upon all works, in accordance with the Board and Scarf lists, including the shute Scale.

This of course could not be regis.; but some of the Trade Sos. of this year contained regulations far more coercive. The Registrar says (p. 13):

With regard to the late strike in the building trades, it was to be expected that as most of the members of F. Sos. are mechanics, the organization offered by these Sos. would not be entirely left unused in obtaining money, even in cases where the funds of the So. were not misappropriated to the purposes of the strike. There is little doubt that in many cases the members were called upon to subs. a small sum weekly or monthly, in add. to their F. So. subs., for the purposes of supporting the men on strike; but it is difficult to obtain evidence of these transactions, as although the members apparently have the option of paying or refusing these add. sums, yet the unseen power exerted over them is generally sufficient to compel them to subs., and to retain the knowledge of the facts within their own circle. With regard to the occasional misappropriation of the funds of F. Sos. for the purpose of the strike, there can be no doubt. . . .

He then proceeds to quote instances.

In Dec. 1859 the Regis. sent out to the F. Sos. of E. & W. 20,052 forms for Returns required by the Act. Up to March 31 there had been received filled up only 4665, with 1488 Ann. Reports.

The Rev. J. B. Owen, in his Lecture on "Popular Investments," pub. about this date, stated that he had investigated the condition of 110 Sos. [mostly, we believe, in South

Staffordshire], and found only 1 to be sound: the rest contained within themselves the means of their own dissolution. No less than 103 held their meetings at public-houses; innkeepers had a direct interest in 97; only 22 were enrolled; and 73 shared their funds annually. Out of the 90 Soss. in one parish [Bilston?] 86 held their meetings at public-houses, and their rules required them to spend £981 annually in drink. During 30 years 40 Soss. had failed in one parish [the same?]; and upwards of £2500 was lost through mismanagement. Five Soss. met at one public-house; the landlord was treasurer for 4; he was found dead in his bed one morning, and the 4 unenrolled Soss. lost their money! These are but a type of many other facts furnished.

A So. known as *The Friendly So.*, held at Anderton's Hotel, Fleet Street, attained its centennial anniversary on 10 April, this year. Its hist. is remarkable in many respects. Since 1803 its members had never exceeded 68 in number; in 1851 there were only 47; in 1860 there were 61. During the period from 1812 to 1859 the So. disbursed to its members the following sums: relief in sickness £2546 12s. 4d.; pensions £676 11s.; free gifts on deaths of members £5384 9s. 11d.; free gifts on death of members' wives £468—total £9074 13s. 3d. The Committee say in their Rep. issued this year, perhaps with just pride:

It has been frequently said that but few F. Soss. have been estab. upon correct principles, in consequence of the contributions being inadequate to the allowances in sickness and free gifts; and that after apparently flourishing for a few years they fall into decay, and thus cause grievous disappointment to those who had joined them in the belief of their stability. But *The F. So.* is in a position to say that which perhaps no other Benefit So. can say: that by the proper adjustment of its contributions and payments, the economy of its management, the excellence of its rules, and the strong interest evinced by the members in its welfare, it has been enabled by the blessing of Providence to steer clear of the rocks on which so many thousands of Soss. have already split, and on which it is to be feared that many more will yet be wrecked; and after an existence of a century, complete and ended this day, and having always strictly fulfilled every engagement, possesses at the present time a capital [fund] of £2350.

This year there was estab. the *Midland Railway F. So.*, which is prob. a type of the more modern form of F. Soss. of this class. *Membership is compulsory, vide Rule 1*, which states that the directors "have resolved to require all those in their employment who receive weekly wages (subject to the exceptions under the rules) to become members"; while Rule 5 declares:

It shall be imperative upon all servants employed in the passenger and goods departments, gaugers, engine-drivers and firemen, receiving weekly wages, who may hereafter enter the service of the Co., to become members of this So. This rule is applicable to every one, as above, who has been 1 month an appointed servant of the Co., at wages exceeding 12s. a week. Officers and servants in the receipt of salaries shall have the option of joining or not, as they may elect.

The So. is governed by a committee of 9 official members, and 16 elected operatives, chosen from the different departments, and passes are given, and special arrangements as to relief from duties made, in order that the operative members may attend. The official members are rarely present.

The Railway Co. subsidize the So. by an allowance of £1000 p.a., irrespective of the number of members. The fact of the subsidy was taken into account in fixing the contributions. These latter are uniform, 9d. a fortnight. The benefits are medical attendance, and 12s. a week full sick pay for 26 weeks; then 6s. a week for 26 weeks; and then 4s. a week for the rest of the sickness, in ordinary illness. If the member be disabled by accident in the course of his duties, he receives 15s. a week instead of 12s.; and 7s. 6d. instead of 6s., and finally 4s., for the periods already stated. In case of death from ordinary causes, the member's family receive £12; but if from accident in the Co.'s service £25.

There is a special contribution of 3d. a fortnight for man., out of which, however, the doctor is paid. The members' contributions are stopped out of their wages. A member, if he has been 7 years or more in the service of the Co., and not less than 5 years in the So., may remain in the So. after leaving the service of the Co., if discharged for reasons other than misconduct. Such members are excluded if 8 weeks in arrear. They receive 10s. p. week in sickness, and £10 at death. Members leaving the Co.'s service may receive 25 p.c. of their contributions, in excess of benefits received.

In 1871 there were 8295 members, and an accumulated fund of £7500.

The *Royal Standard F. So.*, founded 1828, had this year (1860) upon its books 4332 members, with an accumulated fund of £46,356 13s. 1d. It had paid from the commencement of its bus. down to this date the following sums:

	£	s.	d.
For Sickness and Superannuation.....	63,118	17	5
Funeral of Members	13,013	14	0
Wives' Funerals	5,508	0	0
Lyings-in	24,844	0	0
Loss by Fire	1,003	3	3
Militia Substitutes	9	13	6
Imprisonment	134	3	4
Workhouse	1	15	4
Sold out [surrendered] per Rule 38	756	0	0
Total	£108,389	0	10 (See 1877.)

There was this year estab. the *London Cabmen's F. So.* It was understood that at this period there were more than 8000 cabmen in London; and it must be admitted that there are few to whom a F. So. would appear to be more necessary. The contribution was fixed at 1d. per day; the scale of benefits we have not at hand. At the end of the first 6 months the So. had 944 members. Their contributions in the half year had amounted to £608 17s. 10d.; against which there had been paid for sick relief £300 19s. 8d.

There was founded the *Dressing Case Makers and Fancy Trades F. So.*, Exeter Hall. In 1875 the So. had 78 members, with an accumulated fund of £1738.

1861.—Mr. Sotheron Estcourt introduced into the Ho. of Commons a Bill to require all F. Sos. and Ins. Asso. to render to every member thereof, or person depositing money therein, a copy of their accounts. This Bill was subsequently withdrawn; but the Regis. of F. Sos. said in his 5th Ann. Rep. that "some such provisions are absolutely necessary, that every person interested in the solvency of a So. should be furnished with information of the accounts and condition thereof year by year, which is not the case at present with many Sos." [LIFE INS., HIST. OF.]

By an Order of the Ho. of Lords of 16th May this year, a return was required of the number of certificates given by each of the Registrars of F. Sos. in *England, Scotland, and Ireland*, to Rules and Alterations of Rules of F. Sos. and Industrial Sos. since the Act of 1855 (18 & 19 Vict. c. 63), distinguishing each separately; also the number of F. Sos. whose rules are now in the custody of each of the said Registrars. From this Return the following details are obtained:

In *England* from 23 July, 1855, to 16 May, 1861, the Regis. had certified the rules of 5113 F. Sos.; and had given 5537 certificates to F. Sos. which had made alterations in rules previously certified. In *Scotland* from Sept. 1855 to date of order, the number of Sos. regis. was 182; alterations of rules, 192. In *Ireland* during the like period as in *England*, the rules enrolled were 324; alterations of rules, 292. The numbers had on the whole been steadily progressive.

On the 16th May, 1861, the number of F. Sos. whose rules and alterations were in the custody of the respective Registrars were as follows: *England*, 51,588; in *Scotland*, 897; in *Ireland*, 1819. In *England*, the number of *Industrial Sos.* whose rules had been certified since 30th June, 1852, was 327; alterations of rules, 39. The numbers for *Scotland* and *Ireland* were not returned.

The [6th] Ann. Rep. of the Regis. of F. Sos. contained the usual information regarding regis. of rules and alterations, as well as F. Sos. dissolved. These we shall tabulate later in this art., so that they will be brought into comparative review with other years. At the close of the year, the ann. form of return was sent out to 22,948 Sos., but up to the date of his Report he had only received responses from 8140 Sos. He said he did not intend to allow the provisions of the Act to remain a dead letter, but would take proceedings for the recovery of the penalties against the secs. of some of these Sos., who, on a second application, should neglect to comply with the provisions of the law:

If the officer of a F. So. does not prepare an ann. statement for the members, it is necessary that he should be compelled to do so: or to fill up and return to the Registrar the form of general statement sent; and if such ann. statement is prepared, there can be no excuse for the non-transmission of a copy to the Registrar. From communications made to the Regis., it is quite evident that the neglect to comply with the provisions of the Act arises from the fact, that the investment of the funds in some instances, and the application of them in others, have been contrary to law, and might subject the sec. or other officers to penalties; but the object of requiring such returns was with a view of discovering whether the provisions of Acts of Parl. and Rules of the So. were strictly attended to. It is most essential for the protection of members that the ann. statement be prepared and sent to the Registrar.

It was stated in this Rep. that while in *Eng.* 1 out of every 9 of the pop. belonged to F. Sos., in *Belgium* the proportion was 1 in 66; and in *France* 1 in 76 of the inhabitants.

The condition of the *Kent County F. So.* (founded 1828) was at this date as follows; annual income £2017, accumulated fund £20,876. At the valuation of its assets and liabilities on 1 May, 1861, Mr. Ansell certified that a very considerable surplus was then found existing. This surplus is used for providing a fund, out of which members are entitled to *grants in aid* when, in consequence of long-protracted sickness, their weekly sickness-pay is subjected to reduction according to the rules of the So.; also in cases where members having contributed in days of work and wages for weekly pensions in old age, are now arrived at 65 or 70, when such pensions become due.

There was pub. by Archdeacon Fitzgerald a pamph. : *Five Years' Experience of the West Charlton F. So., in a Letter addressed to the Rt. Hon. T. Sotheron-Estcourt, M.P.*

In the *Companion to the (British) Almanack* for this year is an art. on "Friendly Sos.," which furnishes a very good *resumé* of the several Reports of the Registrars of these Sos.

There was founded the *United Kingdom Railway Officers and Servants Asso.* At the end of 1875 the So. had 883 members, with an accumulated fund of £1914.

1862.—This year the subject of Parochial F. Sos. was again introduced to the attention of Parl. by the circumstance of Lord Shelbourne bringing in a Bill "to promote the estab. of Parochial F. Sos." The measure was to be *permissive*, and any 10 persons could request the overseers of a parish to convene a meeting of the ratepayers to decide whether a Parochial F. So. should be estab.; and if two-thirds of the ratepayers

present should vote for the scheme, it was to be adopted. The funds of the Sos. were to be invested in Gov. securities; and any deficiencies therein from time to time were to be made up from the poor-rate. But in case of dissolution of the So., the funds remaining were to be applied to the purposes of the poor-rate. The Bill expressly excluded dangerous occupations—viz. "Any person being a Painter, Grinder, Gilder, Worker in Lead, Railway Servant, or following any occupation prejudicial to health." Nor was any member to be entitled to receive more than 12s. per week from this or any other So. The scheme, which was but a revival of one in 1818 [POOR], was a pet of the late Mr. Tidd Pratt. Parl. rejected it; but attempts were made in other forms—always without success.

There was this year enacted *The Industrial and Provident Soc. Act, 1862* (25 & 26 Vict. c. 87), under the 3rd sec. of which any number of persons, not being less than 7, might estab. a So. for the purpose of carrying on any Labour, Trade, or Handicraft, whether wholesale or retail (except the working of mines and quarries, and except the ins. of banking), and of applying the profits for any purpose permitted by the F. Soc. Acts, or otherwise permitted by law. The Act of 1852 (15 & 16 Vict. c. 31) and the amending Acts (17 & 18 Vict. c. 25, and the 19 & 20 Vict. c. 40) were repealed; but the Sos. regis. under them might be regis. under this Act without payment of fees. Sec. 10 enacted that the provisions of the F. Soc. Acts should apply to the Sos. regis. under this Act in the following particulars: exemption from stamp duties and income tax; compensation to members unjustly excluded; and power of the County Courts in case of fraud.

The [7th] Ann. Rep. of the Regis. of F. Sos., pub. this year, as usual, presented some new points of interest. The number of dissolutions of F. Sos. of which the Regis. had received notice during the year was 112. The commercial distress [Cotton Famine] existing had led to applications being made to suspend the payment of contributions for a time in some Sos. The Regis. saw no legal objection to this, and therefore devised a rule in view of meeting the case. Several Sos. had been summoned for not sending in the Ann. Return filled up; the Regis. intended to proceed in the same direction.

Among the F. Sos. dissolved this year was the *Society of Selected Friends*, Ship and Turtle Tavern, Leadenhall Street, City. It had been founded on the 1 Jan. 1794, for the support of its members in sickness, lameness, blindness, old age and infirmity, and the payment of certain sums on the death of the members or their wives. The application made to the Registrar of F. Sos. (dated 1 April) set forth that more than five-eighths of the members had come to the conclusion that the funds of the So. were not sufficient to meet its engagements, on the grounds that during the last 5 years the expenses had exceeded the income by nearly £100 p.a.; and that while the present income from subs. and fines amounted to £94 12s., the average expenditure amounted to £207 16s. They therefore required the Regis. to investigate the affairs, and make a fair appropriation of the funds among the members; and to dissolve the So. pursuant to the Act of 1860. The number of members remaining was only 38, and the amount of pensions payable was about £50. The income was insufficient to meet and provide for these. The So. was dissolved on 14 May, and the funds divided soon after.

Mr. Henry Ratcliffe pub. at Colchester: *Obs. on the Rate of Mort. and Sickness existing amongst F. Sos.: particularized for Various Trades, Occupations, and Localities. With a Series of T. showing the Values of Annu., Sick Gift, Assu. for Death, and Contributions to be paid equivalent thereto: calculated from the Experience of the Members composing the Independent Order of Odd Fellows, Manchester Unity, F. So.—a Body of 335,000 Members. Ed. of 1861.* The author says in his preface:

In the preparation of the T. of this work, simplicity of structure has been chiefly aimed at, with a view to augment their practical value. Members of F. Sos. are generally willing to adopt improvements in their financial arrangements, when they can be made clearly to perceive their necessity. But the subject is in itself an intricate one to those who have not devoted some special study to it; and this intricacy is increased rather than diminished by a too close observance of technical formulæ or technical expressions. The T. pub. in 1850 by the Manchester Unity have caused the attention of the more intelligent and earnest workers amongst the members to be directed to the question of F. So. finance, and the laws deduced from past experience upon which it ought to be based to insure satisfactory results. The labours of others have, likewise, added much to the stock of information on the subject, and have tended to popularize, to a considerable extent, the method of procedure by which past experience has been rendered available for future guidance.

It is beyond dispute that greater improvements have been made in the man. of these Sos. during the last 14 years, than during the entire period from their formation to that time. Notwithstanding this most satisfactory state of things, it is a source of deep regret to find that some Sos., after having adopted, as a general law, a graduated rate of payment according to age at entrance, have been compelled to fall back upon the old exploded system of equal contributions, and a very inadequate graduated admission fee, or, at least, to leave the adoption of the improved scales optional with the branches. But all permanent improvement is a work of time and of diligent labour, and it is gratifying to know that such progress is being made as to justify the expectation, that eventually a correct system of finance will become, in the estimation of all interested, the chief recommendation of any provident inst. . . .

He further states that the cost incurred in the obtaining, compiling, and pub. the information contained in the present vol. would be about £3500. "This certainly must be regarded as a satisfactory proof that a strong desire exists amongst the members of the Manchester Unity at least to obtain such information as would enable them to place their

Lodges in a satisfactory position." This sum, he adds, had not been abstracted from the funds set apart for relief during sickness, for assu. at death, or for providing for necessitous widows and orphans, but from the management fund of the Lodges—"funds which, being raised by direct levy on the members, are not therefore readily expended, without careful consideration on the part of those most interested in the character and welfare of their cherished inst."

The T. contained in the work will be fully reviewed under FRIENDLY SOS., MORT. AND SICKNESS EXPERIENCE OF.

A very important F. So. was estab. this year, viz. the *Northumberland and Durham Miners' Permanent Relief Fund*. The objects of this So. are stated in the rules to be: "To provide in cases of *fatal accident* for the widows and children or other dependent relatives of the deceased; and in the cases of accident, *non-fatal*, but where the member is permanently disabled, to make suitable provision for him, as hereinafter provided; also a payment in case of fatal accidents to the relatives of the deceased for the purpose of defraying *funeral expenses*." There is a *sickness*, and some other funds worked in connexion with this, of which we shall speak later.

The operations of the So. are confined to the counties of *Northumberland, Durham, and Cumberland*. The general meetings of the So. consist of delegates from some 200 local agencies; and these elect officers, and "decide and determine all matters connected with the So." Many of the local agencies are united into Districts, after the manner of the Affiliated Sos.; and these Districts appoint their own officers, and hold local meetings.

The So. is largely supported by voluntary contributions of the colliery owners, *who are expected to subscribe 20 p.c. on the contributions of their men*. In practice this is not always carried out. Thus the accounts for 1872 show contributions from members £7332 6s. 3d., and owners' per-centages £1011 7s. 6d.—the latter being but 14 p.c. on the former. The contributions are mostly deducted from the wages. In 1872 this was so as to over 14,000 members out of 25,000.

The funds in hand at the close of the year ending March, 1872, were £13,430 17s. 3d., of which £4300 had been a gift to the So. out of the surplus funds subs. for the relief of the sufferers by the Hartley Colliery accident (1862)—which had led to the founding of this So. It is admitted that the contributions of the members would not support the So.

In connexion with this So. there is worked the *Northumberland and Durham Miners' Permanent Benefit So.*, which embodies a "minor accident fund," a "sick fund," and a "funeral fund." All the members of this So. must be members of the *Permanent Relief Fund*; but the great majority of the members of the orig. fund do not belong to the subsidiary one. We have no exact details of the operations of this latter So. [COLLIERIES, INS. OF.] [MINERS.] See *Belgium*, 1852, "Provident Sos. for Miners."

There was this year founded the *Saddlers and Harness Makers Pension Fund Asso.* In 1875 this So. was reported to consist of 5 members only, with an accumulated fund of £4011.

In a paper read by Mr. Samuel Brown before the Inst. of Act. (in 1864), he endeavours to arrive at some statistical conclusions regarding F. Sos. in E. and W. at this date, viz. their numbers, and the number of their members, with their invested funds. Starting with the number of ann. returns sent out, being 21,433, he says: Allowing that some of the Sos. may have been dissolved, and that some of the returns may relate to Burial, Annu. and other Sos. for special purposes, "we may safely conclude there were 20,000 F. Sos. (including the Lodges and Courts of the Orders) in existence at the end of 1862," and which on the basis of the averages deduced from the Sos. which had sent in returns, "would give a return of more than 3,000,000 of members, and at least £11,000,000 funds in hand." A large amount of these funds were deposited in savings banks. In Nov. 1862 no less than 11,829 F. Sos. had such deposits, the total so deposited reaching £1,951,000; while 565 other F. Sos. had direct accounts with the Commissioners for the Reduction of the National Debt, with a total of £2,042,000 to their credit. Thus making a total of nearly £4,000,000 invested in the higher class of securities.

Mr. Brown offers the following general remarks:

The F. Sos., which are sometimes called Benefit Clubs, have for many hundred years been highly popular in Eng.: not merely because they supplied one of the principal wants of the working classes—namely relief in sickness or accident, which disable them from obtaining their usual wages—but, because, by mut. asso., they afford some scope for the talents and sagacity of some of the members to be recognized and appreciated by others. *But by the very nature of their composition they were deficient in the element of stability; and notwithstanding the best intentions of the members, the Sos. have been constantly broken up and reformed.*

Italy.—In this kingdom F. Sos. are designated "Sos. for Mut. Aid." The objects contemplated by these are relief in sickness, with pensions in old age; pensions to widows and orphans; procuring work for the members; evening schools for children of members; loans; receiving deposits to invest at interest; obtaining provisions, etc., at cost price; furnishing materials for work; and enabling skilled workmen to travel in search of employment. Here is seen to be a combination of our (1) F. Sos.; (2) Industrial Provident Sos.; (3) Trade Sos. in part.

We do not learn with precision how many of these Sos. were in operation in this country; 58 are spoken of; but the chief T. concerning F. Sos. is the following, and some of its statistics are of interest:

F. Sos. in the different Italian States in 1862:

STATES.	Per 100,000 Inhabitants.		No. of Female Members to 100 Male Members.	Members relieved to each 100 Free Members.	Days of Sickness to each Member sick.
	No. of Societies.	No. of Members.			
Piedmont and Liguria.....	4'95	1043	6'87	47'3	14'7
Lombardy.....	2'71	769	5'02	23'2	18'6
Parma and Piacenza	1'69	489	10'85	14'4	38'1
Modena, Massa, & Reggio	3'80	616	10'74	6'7	29'7
Romagna	3'27	986	6'80	15'5	29'6
The Marches	2'15	709	12'75	4'2	27'3
Umbria.....	2'73	576	7'58	19'5	19'4
Tuscany	3'01	920	23'63	26'9	11'9
Neapolitan Provinces	'28	81	'36	1'8	4'1
Sicily.....	'33	72	—	—	—
Sardinia	'68	178	7'06	25'1	19'3
Average.....	2'03	512	9'14	29'6	16'4

Here we see that there were only just a fraction over 2 F. Sos. for each 100,000 inhabitants. But as the pop. at this date (exclusive of *Rome*) was 25,003,635, this should give rather more than 500 F. Sos. with 128,000 members. The female members were less than 1 in 10 of males; while the entire number of members claiming on the funds was 29 p.c. of the members free; with over 16 days' pay to each—the maximum rate of sick pay being 1'12 lire (about 11d.), the minimum 0'64 lire (or 6d.).

The following T. shows the rate of mort. and sickness in 58 F. Sos. in *Italy* during 1862, and gives more favourable results than those in the preceding T.:

Age.	Proportion of Members living at these ages.	No. of Members 31 Dec. 1861.	Admitted	Left.	Died.	No. of Members 31 Dec. 1862.	Members Relieved.	Days of Sickness.	For every 100 Free Members		Mean Duration of Sickness of Members Sick.
									Relieved.	Days of Sickness.	
0-15	5	52	7	16	1	12	5	87	11	187	17
16-20	47	373	144	80	1	436	28	461	7	112	16
21-30	236	1990	663	471	13	3169	357	6386	17	306	18
31-40	351	3101	806	645	29	3233	573	10465	18	324	18
41-50	254	2259	429	320	27	2341	444	9848	19	421	22
51-60	86	770	99	59	18	792	159	4339	20	540	27
61-70	17	174	2	5	5	166	51	2140	32	1286	40
over 70	4	36	1	—	3	34	10	778	29	2283	77
	1000	8755	6596	1596	97	9213	1627	34304	18	378	21

Here it is seen that 35 p.c. of the members were between 30 and 40 years of age; that on an average of about 9000 members living there were 97 deaths, or 1'08 p.c.; out of the same number there were 1627 relieved in sickness, or 18 p.c.; with 3'78 days of sickness p. member; the mean duration of sickness being 21 days—all which were very favourable results.

1863.—There were two enactments this year affecting F. Sos., viz.:

1. The 26 & 27 Vict. c. 65—*An Act to Consolidate and Amend the Acts relating to the Volunteer Force in Gt. Brit.*—the 44th sec. of which again enacted that volunteers were not to forfeit interest in F. or Benefit Sos. by reason of such service.

2. The 26 & 27 Vict. c. 87—*An Act to Consolidate and Amend the Laws relating to Savings Banks*—under which provisions were made (sec. 33 and 34) for investing the funds of F. Sos., superseding those of the Act of 1860 (23 & 24 Vict. c. 137). And by sec. 35 it was provided the members of F. Sos. might deposit in savings banks without being liable to disability under F. Sos. Acts in regard to plurality of Sos.

The [8th] Ann. Rep. of the Regis. of F. Sos., pub. this year, in add. to the usual information therein, also contained, "An Abstract of the Returns received from F. Sos. previous to 1st June, 1863," which the Regis. considered would afford useful information with respect to the number of members and the pecuniary position of these Sos. Here is the abstract, which comprehended a greater number of Sos. than on any previous occasion:

T. giving Summary of the Returns of F. Sos. in E. and W. received by the Regis. previous to 1st June, 1863—showing the total funds and number of members in 1862 of the Sos. making returns:

Class of So.	Total No. of Returns.	No. of those in which the No. of Mem. was given.	Total No. of Members given.	No. of Sos. in which the Funds are given.	Total Funds returned.
F. Sos.	4690	3929	990,329	4535	£ 2,953,322
A. O. of Foresters	1364	1106	113,763	1327	404,574
M. U. of Odd Fellows	1655	1481	175,193	1634	1,096,615
Other Orders	1189	1017	95,559	1152	358,001
	8898	7533	1,371,844	8648	4,812,512
Societies for providing Burials only	181	143	278,305	176	70,480
Sos. for granting annu. only	22	14	2,438	22	304,491
Sos. composed of Females only	338	278	28,292	331	119,101
Sos. composed of Sunday School Children and Teachers only	55	49	10,475	54	19,691
Totals	9494	8017	1,691,354	9231	5,326,275

The Registrar, in his Rep., qualifies some of the figures here given as follows:

The "Amount of Funds" is that stated in the Return; but this stated amount in some instances doubtless includes bad debts and doubtful investments which will never be recovered; in by far the great majority of cases, there is no doubt that the sum stated is actually at the disposition of the respective Sos. The "number of members" may also, in some few instances, include hon. members; but the instances are so rare that it may be taken for granted that the "number of members" means the number of effective members only.

Of the Sos. providing for burials only, the greater number were in Lancashire—206,858 members, with £37,587 funds, being the returns from thence. Of those providing annuities by far the greatest proportion was in Devonshire, the returns from which embraced 1844 out of 2438 members, and £249,658 of the total of funds of £304,491.

At the 5th International Statistical Congress held at Berlin this year, Dr. Engel, a great statistical authority in that city, stated that there were in Eng. more than 20,000 F. Sos., besides savings banks, and Sos. for mutual aid; in Prussia more than 4000 of these Sos. (besides miners' funds)—2000 of which had a total of 156,000 members; and in France, Belgium, Austria, and other countries, vast numbers of these Asso.

Mr. Charles Hardwick pub., in Manchester, a pamph. : *Insolvent Sick and Burial Clubs: the Causes and the Cure; or How to Choose or Found a Reliable F. So.; with a large Diagram, suitable for suspension in Club-rooms, showing at a glance the Average Ann. Sickness, and the Expec. of Life at Various Ages.* The author very wisely says:

It has recently been regarded, in certain circles, as "the right thing" to deny and even denounce the action of humbly educated operatives in this direction, simply because many of their efforts have proved abortive. This, to say the least of it, is mistaken policy, and especially so when directed against F. or Benefit Sos.—the self-directed Mut. Ins. Cos. of providently disposed working-men. The object of these Sos. deserves most honourable recognition by men of the highest social status or most advanced intellectual culture. Their action is calculated to largely influence the gradual elevation and improvement of the moral and social position of the great bulk of the labouring portion of the community. Indeed this is not now often disputed. The great complaint against them is that the financial laws in force amongst them are generally framed not in accordance with, but rather in open defiance of, the plainest teachings of statistical science. In too many cases this is unfortunately but too true. Still as there are many hundreds of Sos., the management or direction of any one of which is as distinct from, and independent of that of all the rest, as is any single merchant's estab. from the control of the many other commercial firms spread over the civilized world, it is neither politic nor just to include the whole in one general condemnation; and especially so when we reflect that the errors of the most unfortunate have resulted not so much from want of desire to attain to scientific accuracy, but simply because, until very recently, no such thing as scientific accuracy was to be found, even amongst professional actuaries themselves. Indeed the very bungling experiments, so loudly and so unwisely condemned, form the sole basis of our present improved scientific knowledge on the subject. To the working men themselves is due the high distinction of having gratuitously furnished the raw material which science has resolved into general rules, by which the future prosperity or otherwise of a F. So. can be predicted with all the certainty attendant upon the most reliable of the known laws of social economy.

There was this year founded the F. Sos. Asso., originating in a union of the officers of the three County F. Sos. of Hants, Wilts, and Dorset. [F. Sos. Asso.]

There was pub. at Durham a pamph. : *Both Sides of the Question. Being Letters on the Northumberland and Durham Miners Provident Relief Fund.* By Howie and Shield.

Mr. F. A. New pub.: *The Right and Wrong of Benefit Sos.*

The Registrar of F. Sos. in Scotland in his Rep. for this year remarked that "as the working classes are becoming better informed, and as better means and opportunities are

given them to become acquainted with the comparative advantages of Annual and of Permanent F. Sos., their preference is more and more largely given to the latter." This a more solid class of Asso. was becoming increasingly general there.

1864.—There was no new Act bearing directly upon F. Sos. passed during this Session of Parl.; but the *Gov. Life Ins. and Annu. Scheme* was authorized by the 27 & 28 Vict. c. 43, and was to come into operation as soon as the necessary T. could be prepared. This might have interfered very materially with one of the functions of F. Sos., viz. the insurance of a sum payable on death, if the scheme had ever become in any degree a success; but it has been from the beginning, and still remains, a practical failure! [GOV. INS. SCHEMES.] [LIFE INS.]

Another Act—the 27 & 28 Vict. c. 56—declares (ss. 4 and 5) that no stamp duty should be chargeable on any *Probate of Will* or *Letters of Administration* to be granted in the U.K. where the whole estate and effects of the person dying should not exceed £100. This measure was especially beneficial to members of F. Sos.

In the [9th] Ann. Rep. of the Regis. of F. Sos. pub. this year there is nothing calling for any special comment.

In the *Quarterly Review* for Oct. this year there appeared an art. on "Workmen's Benefit Sos.," wherein the following passages occur:

The cultivation of the habit of prudent self-reliance amongst the great body of the people is justly regarded as one of the principal needs of our time. Every individual, however humble his social position may be, is the better for knowing and feeling that his happiness necessarily depends in a great measure upon his own industry, economy and providence. Any attempt to elevate a people mainly by charity must always fail—chiefly because it tends to sap the foundations of self-respect, if it do not break down the very outworks of virtue itself. There is indeed reason to fear that some forms of benevolence, however well meant, tend to create the very evils they are designed to cure, and to encourage the poorer classes in the habit of dependence upon the charity of others, to the neglect of those far healthier means of social well-being which lie within their power.

It is because the Benefit Sos. of the working classes are calculated to cherish the habit of genuine self-reliance and self-respect, that we consider them eminently worthy of public encouragement. Viewed in this light they are entitled to be regarded as among the most important economic inst. of our time. They exercise an amount of social influence which it would be difficult to over-estimate. It is certainly a striking fact that some 3 millions of working men, representing an aggregate of about 10 millions of the pop. of these islands, should have spontaneously organized themselves into voluntary asso. for the purpose of mut. support in time of sickness and distress. Any political organization embracing but a tithe of the number would prob. have excited more public attention than this has done, although the moral and social influences which the Benefit Sos. exercise are of vastly greater importance.

Much valuable information is contained in this art., which we have made free use of in these pages.

Mr. Samuel Brown read before the Inst. of Act. a paper: *On the Present Position of F. Sos. in E. and W.*; wherein he passed under review many of the later facts embodied in the Ann. Rep. of the Regis. of F. Sos.; and made some estimates of the number of F. Sos. in E. and W., the number of their members, funds, etc. (See 1862.)

Mr. Geo. C. Oke pub.: *F. Sos. Accounts: a Practical Exemplification of the "Instructions in Book-keeping for F. Sos." issued by the Registrar; with Directions for Checking, etc.* This was really a book of forms for the use of F. Sos.

There was this year founded the *Cricketers Fund F. So.* In 1875 this So. was said to consist of 46 members, with an accumulated fund of £2851.

1865.—The [10th] Ann. Rep. of the Regis. of F. Sos. pub. this year, gives some few details of interest. The form of Ann. Return was sent out at the close of 1864 to 22,511 F. Sos. Returns came in from 10,398—a greater number than in any previous year; but still from less than one-half the Sos. supposed to be in existence.

Among the Sos. presenting their rules for regis. this year was one with quite a hist., viz. *The Keelman's Hospital So.* (Newcastle-upon-Tyne) *Funeral Fund*. The Hospital was built in 1700; but before that period the keelmen belonging to the River Tyne had agreed to raise a fund for the aged or distressed of their body, by allowing 1d. p. week to be deducted from their wages, for every tide they had gone over during the week. This deduction was made at the several pay offices; and was for some time under the direction of the fitters and certain gentlemen who took the trouble of being the trustees of the Keelmen's Fund.

In 1730 a number of those who had been contributors on the plan already stated agreed to form themselves into a So. upon another plan, viz. by paying equal and stated contributions every 6 weeks. Articles were prepared, to which they agreed; and the scheme commenced with about 200 members. But as the other keelmen did not join, persons who were not of this class were admitted, in view of having sufficient members to support the Hospital.

The So. was at this date (1865) said to be in a flourishing condition, with 72 members, and £200 invested. In Dec. of this year new rules were agreed to for the Funeral Fund, and the same were regis. under the F. Sos. Acts.

Among the Ann. Reports sent in to the Regis. this year was that of the *Norman So.*, held at the Oxford Arms, Bethnal Green Road, London, E. This So. was founded in 1703; and is therefore one of the oldest F. Sos. in existence. It now had 55 members, the oldest of whom joined in 1815; the youngest in 1864. The total income of the So. this year was £134 6s. 8d.; the expenditure, £103 16s. 10d.—leaving a bal. of

£30 9s. 10d. on the operations of the year. The invested funds of the So. at the close of 1865 reached £2259 10s. 8d., with £47 11s. 1d. cash in hand.

Among the Sos. dissolved, enumerated in this Rep., were (*inter alia*) the following :

Sea Lion Female F. So., Sea Lion Inn, Market Place, Leek (Staffordshire); estab. in 1831; dissolved by the members May, 1864; number of members 41; amount of funds £340; divided share and share alike.

Stone Female F. So., Crown Hotel, Stone (Staffordshire); estab. in 1820; dissolved by the Regis. under powers of Act of 1860; the application stated that no new members now entered; the number of sick and superannuated members was gradually exhausting the funds, the income not meeting the expenditure; number of members 170; amount of funds £1083 8s. 4d.; divided according to number of years' membership.

Sons of Silin F. So., White Lion Inn, Llansilin (Wales); estab. 1832; number of members at date of dissolution 289; amount of funds not stated; but divided in proportion to term of membership; reserving £190 17s. to be paid to pensioners.

Gild of Our Lady and St. Patrick, St. Mary's School-room, Sunderland, dissolved; no details.

These are but types of the whole.

There was pub. in Oxford, by the Rev. W. H. Ridley, a pamph.: *F. Sos. and Benefit Clubs*.

1866.—There was enacted a measure which gave an extension to the operation of the F. Sos. Acts in a new direction. This was the 29 & 30 Vict. c. 34—*An Act to give further Facilities for the Estab. of Sos. for the Assu. of Cattle and other Animals*—which recites : "Whereas it is expedient to give further facilities for the estab. of Sos. for the assu. of cattle and other animals, under the F. Sos. Acts." Then power is given for this purpose, under the provisions of the Act of 1855—the amount of ins. not to be limited (1). Contributions to be recovered in County Courts (2). [LEGISLATION.]

In the *Bankruptcy Bill*, before Parl. this year, it was proposed to abolish the preferential claim on trustees and officers of F. Sos. of moneys belonging to such Sos.

The [11th] Ann. Rep. of the Regis. of F. Sos. was pub. this year. It gives the statistics for 1865, which will be found in the T. at the end of this art. With the close of 1865 came the period for sending out the quinquennial returns as to sickness and mort. experienced during the past 5 years. Of 22,834 forms so sent out, but 7706 were received filled up, and of these 170 omitted to give the name of the So. or the place of its location. The information embodied in these returns we believe has never been pub.

In the Appendix of this Rep. was contained, *Suggestions for the Estab. of F. Sos. on Sound Principles*, by J. Tidd Pratt, Regis. of F. Sos.

Among the F. Sos. enumerated in this vol. as having been dissolved were the following :

Aighursh Glory F. So., Liverpool; estab. 1856; dissolved by members Feb. 1866; number of members 15; amount of funds £12 10s.

Apollo Gift and Burial Fund, Ratcliffe (Middlesex); estab. 1849; dissolved by members Sept. 1865; number of members 116; funds £20.

Freedom's Daughter So., Chowbent (Lancashire); estab. 1862; dissolved by members 1865; number of members 16; amount of funds £19—given to *Foresters F. So.* No. 4677.

Gild of St. Joseph So., Birmingham; estab. 1860; dissolved by members Feb. 1866; no statement as to number of members or amount of funds.

Good Samaritan Lodge of Odd Females, Leigh (Lancashire); estab. 1856; dissolved by members March, 1866; number of members 42; amount of funds £128; divided according to term of membership.

Grand Protestant Inst. and Asso. of Loyal Orangemen's Sick and Funeral F. So., Birkenhead; estab. 1862; dissolved by the members, of whom there were 8, in July, 1865, with £31 funds. Each member to receive a dividend on all payments made to the funds of the So.

London and Blackwall F. So., Blackwall; estab. 1841; dissolved by members July, 1865; number of members 68; amount of funds £1013 19s. 3d.; divided according to period of membership.

Noah's Ark Lodge, Heague (Derbyshire); estab. 1854; dissolved Nov. 1865.

St. James Total Abstinent F. So., St. Peters Port (Guernsey); estab. 1864; dissolved by members Oct. 1865; number of members 28; and of funds £42 19s. 10d.; divided equally.

Westminster Cabmen's So.; estab. 1861; dissolved by members 1866; number of members 24; amount of funds £74; divided according to period of membership.

Sir John Kay Shuttleworth, Bart., in his Address on Economy and Trade to the Social Science Congress at Manchester this year said :

F. Sos. or Benefit Clubs, which have had a spontaneous origin among the manual labour class, are often founded on calculations and conducted by rules inconsistent with the principles of Ins. and V. Statis. These again are the errors of ignorance; but the power of independent organization which they exhibit, and the salutary objects which they seek to attain, must be reckoned among the proofs of the growing political capacity of working men. . . .

There was pub.: *Rep. on Metropolitan Benefit Sos. Asylum*.

Also, *Handy Book on the Law of F. Sos.* By H. F. Gibbons, LL.B.

There was this year founded at the Green Dragon, Bishopsgate Street, Lond., the *United Horticultural Benefit and Prov. So.* At the close of 1875 it had 58 members, with an accumulated fund of £1264.

1867.—There was enacted the 30 & 31 Vict. c. 144—*An Act to enable Assignees of Pol. of Life Assu. to sue thereon in their own names*; but the 8th sec. of the Act provides that it shall not apply "to any engagement for payment on death by any F. So." So that it still remained that any pol. or engagement for payment on death could not be legally assigned so as to give any interest therein to the assignee, under which he could sue.

The Regis. of F. Sos. in his [12th] Ann. Rep. pub. this year, reviewing the course of Legis. in respect to F. Sos., said:

When this Act [1793] was passed, the Legislature evidently had in view that sort of Club or So. which exists at the present day, and is known under the general term of "F. So." This So. is local in its operations; the members (as a rule) know each other, and personally assist in its management; none of the officers are paid, except a trifling acknowledgment to the sec. for his services. No agents or collectors are employed. The affair is mut. and not speculative. The whole is circumscribed by the limits of the town or parish where it is estab. Such is the normal F. So.; and 99 out of every 100 F. Sos. are of this class. After some years this orig. idea of a F. So. was departed from; Sos. were formed and regis. under the Act for supplying coals to the members; others for supplying relief to poor persons in winter; others (such as the *Clergy Mut. and Provident Clerks*, etc.) were formed for carrying on the bus. of an ins. co. To meet these alterations of circumstances, the Legis. provided exceptional legislation. . . .

The time has arrived now for the discussion of another question, namely, whether the further development of, and departure from, the orig. idea of a F. So., in such cases as the *Royal Liver*, and other similar Sos., which furnish death ins. on an extensive scale all over the country, does not call for further exceptional legis. with respect to them? It is notorious that great hardships are suffered by the persons who join them, that the members are generally poor, that they are spread all over the kingdom, frequently hundreds of miles from the office of the So.; they never participate in the management of the So., and the whole bus. is managed by a few collectors, and a central and irresponsible Board, over which the Sec. usually reigns supreme; and, frequently being the trustee or treasurer also, not the slightest check is, or can be, obtained over him. To meet the cases of such Sos., it is suggested that the precedent of exceptional legis. already laid down should be adopted by provisions in an Act which may be passed relating to F. Sos., to apply to Sos. which grant assu. for a sum at death of £10 and under, without any assu. connected with it. It is also proposed that, as arbitration has been proved to be a sham and a mockery in many of these Sos., all disputes should be referred to Justices. Secondly, agents of such Sos. should be liable to be summoned. Thirdly, if agent of So. take money on account of ins. before delivery of pol. and copy of rules, to be liable to a penalty of 20s. In these Sos., in case of death, it frequently occurs, that a dispute is originated as to whether the member was, or was not, within benefit (as it is termed) at the time of his death; but as in this dispute on the one side is the So. and the Sec., with its large funds and irresponsible manager; and, on the other, people of the class who literally live "from hand to mouth," it is quite clear that the weaker party generally has to give way, and any idea of obtaining redress by legal means at present existing is quite out of the question. To meet this evil it is suggested that a clause of the following character be passed: "No policy to cease being operative without notice being sent by a regis. letter through the post, or a written notice delivered to the insurer, or his last known place of abode, in the presence of one witness. The pol. to be indisputable, except on these terms."

It has been already stated that there is not, nor can be, any supervision of the affairs of these Sos. by the members, and therefore the officers frequently neglect to send the Ann. Returns to the Regis., quite regardless of penalties, as the funds are large, and entirely under the directors' control; and when Returns are sent, the accounts are "lumped" together in such an extraordinary manner that it is impossible to ascertain anything definite concerning the So.'s affairs.

Whether these propositions or others to the like effect are adopted or not, the time cannot be far distant when Parl. will be compelled, by the enormities of the system of these Sos., to regulate them by the only means by which they can be regulated, viz. by exceptional legis. To connect these Sos. with the F. Sos. proper, in any legis. on the subject, will be only to assist in procuring a continuance of those evils which the poor at present suffer in connexion with them; and which are not only a scandal to the character of F. Sos., but to the nation at large. . . .

The Regis. has, again and again, cautioned parties from becoming members of F. Sos. estab. in London, and other large Sos., through agents and collectors, without ascertaining the respectability of the trustees and managers, and particularly as to the mode of settling disputes. Further inquiry should also be made as to the working expenses of such a So., which will be found to vary from 30 to nearly 50 p.c.; and though the T. have been certified by an actuary, such T. do not contemplate such expenses of management.

Among the dissolutions of F. Sos. reported in the present Rep. were the following:

Amalgamated Block Printers F. So., Merton (Surrey); estab. 1866; dissolved May, 1867; number of members 119; funds £20.

Engravers Mut. So., Red Lion Street, Holborn (Middlesex); estab. —; dissolved June 1867; no statement of members or funds.

Female Peace and Union So., Macclesfield; estab. 1819; dissolved June, 1867; number of members 97; amount of funds £90.

Hollow Ware Pressers Burial So., Hanley (Staffordshire); estab. —; dissolved May, 1867; no statement of members or funds.

Liverpool and Birkenhead Cutlers and Drillers Sick and Burial So.; estab. 1865; dissolved Oct. 1866; number of members 9; amount of funds £18.

Loyal St. Mary Lodge of the Order of Old Friends, Barnet (Middlesex); estab. 1853; dissolved by members Oct. 1866; 21 members; funds £46.

Maritime Ancient Britons So., Tower Hill (Lond.); estab. —; dissolved Mar. 1867; no statement of members or funds.

National Shipwrights F. So., Liverpool; estab. 1863; dissolved by members Oct. 1866; number of members, 40; amount of funds £170.

New Coachmakers Benefit So., Drury Lane (Lond.); estab. 1822; dissolved 1867; number of members, 9; funds £267.

Open Hand and Upright Heart Lodge, I.O.O.F., W.U., Bradley; dissolved Dec. 1866; no details.

Philadelphia Union F. So., Haverhill (Suffolk); estab. 1814; dissolved Jan. 1867; no statement as to members or funds.

Prison Officers Benefit So., Dartmoor Prison; dissolved in April, 1867; no statement as to date of estab., number of members, or amount of funds.

Revivers of Life F. So., Houndsditch (Lond.); estab. 1774; dissolved March, 1867; no statement of members or funds.

Salem Chapel Sick So., Leeds; estab. 1853; dissolved June, 1866; number of members 34; funds £200.

Sons of Temperance Treasure Division, United Free Gospel Tavern, Prescott (Lancashire); no details.

United Pilots Benefit So., Commercial Road (Lond.); estab. 1847; dissolved 1867; no statement of members or funds.

United Sisters F. So., Bow (Middlesex); estab. 1846; dissolved June, 1867; number of members 19; funds £114.

Waterman's F. So., Gosport; dissolved by members May, 1867; no statement as to members or funds.

There was issued by the Poor Law Board, under date 19 Aug. this year, two Returns of a melancholy character, which we proceed to quote:

1. *Return of the Number of F. Soss in each County in E. and W., enrolled and certified since June, 1793 (33 Geo. III. c. 54), to 31 May, 1867; and also of the Number of such Soss which have been Dissolved or Broken up:*

	Enrolled and Certified by Registrar.	Dissolved, etc.	Remain- ing.		Enrolled and Certified by Registrar.	Dissolved, etc.	Remain- ing.
ENGLAND:				Salop	619	262	357
Beds	338	78	260	Somerset	811	311	500
Berks	251	83	168	Stafford	1788	469	1319
Bucks	253	72	181	Suffolk	854	273	581
Cambridge	300	92	208	Surrey	1414	646	768
Chester	1035	288	747	Sussex	420	76	344
Cornwall	437	191	246	Warwick	1308	438	870
Cumberland	254	125	129	Westmorland	67	13	54
Derby	763	168	595	Wilts	365	114	251
Devon	1007	432	575	Worcester	691	218	473
Dorset	269	86	183	York	2901	870	2031
Durham	1077	311	766	Total England	35,868	13,223	22,645
Essex	780	257	523	WALES:			
Gloucester	922	277	645	Anglesea	52	24	29
Hants	782	288	494	Brecon	224	87	137
Hereford	152	62	90	Cardigan	108	34	74
Herts	337	105	232	Camarthen	194	30	164
Hunts	144	34	110	Carnarvon	76	17	59
Kent	1110	462	648	Denbigh	218	74	144
Lancaster	5207	2064	3143	Flint	153	40	113
Leicester	594	148	446	Glamorgan	1137	293	844
Lincoln	454	76	378	Merioneth	60	15	45
Middlesex	4597	2890	1707	Montgomery	106	48	58
Monmouth	663	192	471	Pembroke	101	47	54
Norfolk	1003	229	774	Radnor	17	3	14
Northampton	501	92	409	Total Wales	2,447	712	1,735
Northumberland	560	204	356	Total E. & W.	38,315	13,935	24,380
Notts	525	144	381				
Oxon	279	80	199				
Rutland	36	3	33				

In all these returns we have to regret that *Scotland* and *Ireland* are omitted. It appears to be too much for legislative wisdom to obtain complete returns for the U.K. which it governs! Mr. Tidd Pratt remarks: "The above Return is made from information furnished by the Soss; though there is no doubt others have been broken up or dissolved without notice to the Registrar."

2. *Return of the Number of Paupers in each Union Workhouse who have been Members of F. Soss which have been Dissolved or Broken up:*

ENGLAND:	Cambridge ...	48	Derby	45	Essex	187
Beds	Chester	80	Devon	115	Gloucester	132
Berks	Cornwall	66	Dorset	32	Hereford	8
Bucks	Cumberland	25	Durham	140	Herts	147

ENGLAND, <i>cont.</i>		Oxford	18	Worcester	153	Carnarvon	—
Hunts	23	Rutland	3	York, E. R.	27	Denbigh	—
Kent	227	Salop	68	York, N. R.	13	Flint	—
Lancaster	302	Somerset	104	York, W. R.	229	Glamorgan	—
Leicester	56	Southampton	104			Merioneth	—
Lincoln	43	Stafford	141	Total England	3931	Montgomery	—
Middlesex	370	Suffolk	138			Pembroke	—
Monmouth	68	Surrey	186	WALES :		Radnor	—
Norfolk	127	Sussex	58	Anglesea	—		
Northampton	43	Warwick	128	Brecknock	12	Total Wales	4
Northumberland	11	Westmorland	4	Cardigan	—		
Nottingham	37	Wilts	79	Carmarthen	5	Total E. & W.	4075

Of 23,407 Ann. Returns sent out by the Regis. at the close of 1866, to be filled up by the Sos., but 10,678 were returned up to 1st July, 1867. These gave the number of members as 1,672,176; and the amount of their funds £6,668,386.

At the close of the Session, the Earl of Lichfield introduced to the House of Lords a Bill to amend the law relating to F. Sos. This will be spoken of next year. As also a Return moved for by the Earl of Devon.

There was pub. by Mr. W. Harral Johnson: *The Past, Present, and Future State of F. Sos.*, in which he evinces a familiar knowledge of the details of many of the frauds which have been concocted under the shadow of these Sos.—and recommends that in future they be formed under the Limited Liability Law, and not under the laws relating specially to F. Sos.

There was also pub. this year by Mr. J. Curtis: *Lecture on Odd Fellowship.*

1868.—The Earl of Lichfield's Bill before the Ho. of Lords this year for amending the Law of F. Sos. contained the following provisions. 3. No child under 7 years to be insured. 4. Printed pol. and copy of rules to be delivered to every member. 5. Member not to be trans. from one So. to another. 6. "Officer" to include "Agent" or "Collector." 7. No forfeiture by non-payment of contribution to collector, until notice from Sec. to member. The other clauses sought to adapt the present laws of F. Sos. to those having Branches. 15. A F. So. enrolled under F. Sos. Acts not to be regis. under Cos. Acts. Mr. Tidd Pratt, in his [13th] Ann. Rep. (p. 77), says: "This Bill, the object of which was to protect the working classes from the frauds and losses they suffer in becoming members of Burial Sos. through agents and collectors, was as a matter of course opposed by the officers of such Sos., whose salaries and commissions would have been interfered with." Accordingly some of these Sos. took active measures to cause petitions to be presented against the measure. The Bill was finally withdrawn, after the "second reading," upon the understanding that a Royal Commission would be issued to investigate the entire question of F. Sos. (See 1870.)

In the accounts of the Royal Oak (of Liverpool) for this year it was seen that the So. had spent £170 in promoting petitions against this Bill. The Royal Liver and the St. Patrick's also incurred expenditure for the same purpose. A "private" circular issued by the United Assu. Sick and Burial So. (Liverpool) contained the following passage:

In getting up this Petition the Committee of Man. expect that you will use every energy and spare no labour. Remember the defeat of this measure is a matter of the most vital importance to the continued prosperity of the So. The measure is not really to amend the laws relating to F. Sos., or for their protection; but a cunning attempt to set up a Gov. assu. in opposition, and to rob the poor of their independence, by taking from them the management of their own affairs.

There was issued a Ho. of Lords Return prepared in conformity with an order made (dated 19th Aug. 1867) on the motion of the Earl of Devon; and ordered to be printed 28 April, 1868:

Return from the Trustees or Sec. of every F. So. legally estab. in Eng., Scot. and Ireland, having paid collectors or agents, of the names, residences, title, business or occupation of the patrons, presidents, trustees, committee, directors, collectors, and agents, of every such So. on the 1st Jan. 1867; with the name of the place at which by the rules such So. is estab.; and the places at which the several collectors and agents reside; together with the salaries, allowances, and emoluments of each paid officer, collector, and agent for the year ending 31 Dec. 1866; with the number of the members of each such So., and the amount of the funds on the 1st Jan. 1867; and also the amount of contributions received and the expenses of man. under distinct heads, in the year ending 31 Dec. 1866.

There were 38 distinct Sos. which returned themselves as coming within the terms of this order, and which we have arranged alphabetically for convenience of reference, in the T. on the opposite page.

Many of the details here given are very striking; but it is impossible not to feel that there is an incompleteness in the Return. Every County F. So. must have agents, and these must be paid, either by the members or the So. Why then are the County of Kent, the Hampshire, and the Wiltshire Sos. the only ones of this class included in the return? What, too, of the other large Burial Sos. of Lancashire, and other parts of England? The large Affiliated Orders probably escape, on the principle that their branches are distinct organizations. Then again there are incongruities. Why are the Friendly So.

or Free Gardeners Lodge of Dalry (Ayr) and the Hazel Grove Provident So. of Stockport included?—these having no paid agents, or, as they state, no agents at all! It is no doubt desirable to keep a sharp check upon the "agency system" in F. Sos.—but has this Return lent any real aid in this direction? We doubt it.

No. of Agencies.	NAMES OF SOS.	No. of Members.	Funds.	Income.	Expenses of Man.
10	Benevolent Burial So., Leek (Staffordshire)	6,309	£ 546	£ 583	£ 45
8	Birmingham United Legal F. Burial So.	5,792	3,621	1,440	1,007
1	Bramley Equitable F. So. (near Leeds)	139	56	28	3
35	British Workman's Sick and Life Assu. F. So. Walsall (Staffordshire)	1,125	45	656	246
6	Burial So., Failsworth (Manchester)	4,330	808	350	12
20	Burslem Mut. Burial So. (Staffordshire)	23,477	10,998	1,872	490
16	Chorley Family Funeral So. (Lancashire)	21,098	237	1,455	54
32	Congleton Benevolent F. So. (Cheshire)	11,783	680	856	—
20	County of Kent F. So. (Maidstone)	950	2,223	2,082	156
24	Dunkenfield F. So. (Cheshire)	5,000	268	536	95
18	Friendly So., Hollingworth (Cheshire)	7,097	1,494	642	124
none	Friendly So. or Free Gardeners Lodge of Dalry, Ayr (Scotland)	495	1,945	314	16
14	Good Design Burial F. So., Hull (Yorks)	3,339	569	721	194
12	Good Intent F. Burial So., Hull (Yorks)	2,501	681	531	137
44	Hampshire F. So. (Winchester)	3,192	37,927	3,195	—
none	Hazel Grove Provident So., Stockport (Cheshire)	3,097	519	290	40
2	Hulme Good Intent Burial So. (Manchester)	3,200	490	664	156
13	Isle of Wight Friend-in-Need (Newport)	4,837	605	1,306	139
77	Liverpool Protective Burial So.	32,756	9,609	8,167	2,341
178	Liverpool United Legal F. Burial So.	58,863	12,808	15,487	6,042
246	Liverpool Victoria Legal F. and Ins. So.	127,286	10,465	—	—
25	London St. Patrick's F. Burial So., 16, Polygon, S.W.	9,000	802	2,140	779
2	Loyal British Philanthropic F. So., Leigh (Lancashire)	4,575	665	435	31
42	Loyal Philanthropic F. So. (Liverpool)	45,690	11,356	12,742	4,356
157	Mutual Provident Alliance (London)	12,343	75,103	17,502	3,261
6	New United F. So. (Manchester)	14,933	2,925	2,860	591
32	Original Coventry Benevolent Burial So.	8,484	3,929	1,003	683
81	People's Family Life Assu. and Sick Benefit So. (Dudley)	8,164	3,347	6,598	1,657
163	People's Universal Life Assu. and Sick Fund F. So. (Wolverhampton)	10,824	2,763	3,379	1,251
162	Rational Sick and Burial Asso. (Manchester)	8,703	14,290	9,287	*1,200
10	Refuge Life and Sick F. So., Dunkensfield (Cheshire)	650	54	270	43
764	Royal Liver F. So. (Liverpool)	544,467	117,930	141,258	53,695
27	St. Anne's Catholic Burial So. (Liverpool)	24,000	823	5,254	1,987
19	Tunstall Benevolent Burial So. (Staffordshire)	11,471	3,948	1,179	171
382	United Assu. Sick and Burial So. of St. Patrick (Liverpool)	150,000	18,188	33,270	16,440
84	United Patriots Benefit and Provident Assu. So. (London)	5,884	8,515	7,498	1,139
22	Unity Life Assu. and F. So., Longton (Staffordshire)	3,159	229	2,857	606
400	Victoria Benefit So. (London)	7,000	5,364	7,311	2,246
95	Wiltshire F. So. (Devizes)	6,394	27,726	6,303	1,663

* This So. has a "Juvenile and Adult Funeral Fund" not included in these figures.

The Registrar of F. Sos. pointed out (13th Rep. p. 74) that the number of members in 34 of these Sos.—that is, omitting the *Mut. Provident Alliance* and the 3 County Sos.—was 1,127,473, while their funds amounted to £274,919—or about 4s. 11d. p. member; while in the other 4 Sos. the number of members was 22,879, and the funds £163,079—or about £7 3s. p. member; but then he also points out that the nature of the bus. of *Burial* Sos.—which is that of a considerable proportion of the 34 other Sos.—is very different from that of F. Sos. properly so called; and vastly different (we may add) from that of the *Mut. Provident Alliance*.

It may be assumed that the Return bore, or was intended to bear, some relation to the Earl of Lichfield's Bill, already spoken of as being before the Ho. of Lords this year.

The [13th] Ann. Rep. of the Regis. of F. Sos., after dealing with some of the points already spoken of, and reviewing in detail the Ho. of Lords' Return, proceeds as follows (p. 79):

From the numerous and almost daily complaints made to the Regis. since his last Rep. by parties who cannot obtain payment of their claims from Burial Sos., he has thought it to be his duty, for the benefit of the working classes, to pub. the following obs., with the hope that the public press, clergymen and others, will endeavour to prevent the working classes from joining Burial Sos. estab. under the F. Sos. Acts, without first ascertaining that they are joining solvent inst., by an inspection of the actuaries' reps. as to whether their assets are sufficient to meet their liabilities; as, in his opinion, it would be far preferable that the working classes should invest their contributions in a savings bank, than insure their lives in Burial Sos., unless they are solvent, and honestly managed. It should be distinctly understood that though the Regis. has certified [enrolled] the rules, which he is bound to do if they are not illegal, his certificate, or that of an actuary, to the sufficiency of the contributions, does not in any way vouch for the solvency of the So., or the respectability of the trustees, treasurers, or officers; or that the money will be paid on the death of the party insured. . . .

About 30 years ago *Burial* Sos., as now carried on, were estab., not by parties being members of

such Sos., but as *ins. offices*, by persons receiving large salaries as treasurers, secretaries, clerks and committee-men, having agents and collectors, also well paid, in all the principal towns or parishes in Gt. Brit. Several of these Burial Sos. have obtained through their agents and collect a very large number of insurers.

The parties insured in these Sos. have generally no form of *pol. given them*, but merely a card which is entered their weekly payments; and in case of dispute the claimants are usually compelled under the rules to refer the same to arbitration, which arbitration is generally held at a place where the So. is estab.; so that if the deceased reside in *London*, and the So. was estab. in *Birmingham*, the claimant must go to Birmingham to lay his or her claim before the arbitrator.

He then gives a list of 10 Burial Sos. (all regis.) showing from their own Ann. Rep. that the number of persons insured was 486,612; the gross receipts for the year were £94,323; the expenses of man. £36,301; the payments for deaths £64,386—these on last items making together £100,687—so that the payments for deaths and expenses of man. in the year were £6364 more than the whole amount of the receipts from the members in that time. The amount of funds in hand was only £67,257, or about 2s. 1d. per member; whilst the amount insured he estimated to be £1,500,000!

The Regis. sent out 23,174 forms for Ann. Returns, and received 11,408 filled up. But nearly 400 of the Returns failed to identify the So. to which they related; many failed to state the number of members; others omitted to state amount of funds. On the whole, however, these returns covered Sos. having 1,647,814 members, with funds reaching £7,095,537. An abstract is given in the Rep. The amount held by some of the Sos. was ridiculously small; thus there was 1 So. with 34 members, and assets £1; another with 40 members, and assets £2; a third with 99 members, and assets £15. But classifying 10,264 Sos. out of the whole, the result was as follows: 3161 societies with less than £100 in hand; 4222 from £100 to £500 in hand; 1602 from £500 to £1000; 903 from £1000 to £2000; 316 from £2000 to £5000; 50 from £5000 to £10,000; 18 from £10,000 to £20,000; 12 from £20,000 to £50,000; 3 from £50,000 to £100,000.

Among the 185 F. Sos. dissolved, as reported in this vol., were the following:

- Benefit So. of Plasterers*, Sir Isaac Newton, Union St., Middlesex Hospital; estab. 1825; dissolved by members 1868; number of members 45; funds £764.
- Drake's Benefit, Sick, and Death So.*, Plymouth; estab. 1852; dissolved by members Sept. 1867; number of members 56; amount of funds £150.
- Co-operative Painters F. So.*, Newark (Notts); estab. 1867; dissolved by members Jan. 1868; number of members 9; funds £10.
- Freedom's Granddaughters' Lodge* (A. O. U. O. Fellows), West Houghton (Lancashire); estab. 1865; dissolved by members Oct. 1867; number of members 11; funds £31.
- Gardeners Provident F. So.*, Stoke-upon-Trent; estab. 1862; dissolved May, 1868; number of members 11; funds £34.
- Iron Ore Brotherly F. So.*, Bigrigg (Cumberland); estab. 1860; dissolved Jan. 1868; number of members and amount of funds not stated.
- Lady Charlotte F. So.*, Tredegar (S. Wales); estab. 1840; dissolved by members Sept. 1867; members 43; funds £182.
- Lapidaries Mut. Gift So.*, Queen's Square (London); estab. 1865; dissolved by members April, 1868; number of members 12; funds £15.
- Lord Townshend's Widows and Orphans So.*, Tamworth; estab. 1862; dissolved by members March 1868; number of members 15; funds £18.
- Mill Band and Hose Pipe Makers F. So.*, New Kent Road (London); estab. 1848; dissolved by members March 1868; members 10; funds £20.
- New Good Intent F. So.*, Thames Ditton (Surrey); estab. 1856; dissolved by members July, 1868; number of members 34; funds £52.
- Old Man's Club*, Milton Ernest (Beds); dissolved Dec. 1867.
- Operative Watchmakers' F. Sos.*, Prescott (Lancashire); estab. 1866; dissolved by members 1868; number of members 50; funds £125.
- Prince of Wales's Tent* (No. 781, Rechabites), Chorlton-on-Medlock (Lanc.); estab. 1856; dis. by memb. Mar. 1868; number of memb. and amount of funds not stated.
- Smiths Mut. and Benevolent Fund*, Newcastle-on-Tyne; estab. 1832; dissolved by members Oct. 1867; number of members 14; funds £4.
- Star of Gravesend United Ancient Order of Druids*, Gravesend; estab. 1865; dissolved by members Feb. 1868; number of members 12; funds £15.
- United Brothers and Sisters*, Clerkenwell (London); estab. 1829; dissolved by members Feb. 1868; number of members 36; amount of funds £262.
- United Printers Burial So.*, Hanley; estab. 1866; dissolved by members Jan. 1868; number of members 71; funds £30.
- Young Englishman's Conservative F. So.*, Tewkesbury; estab. 1865; dissolved by members Sept. 1867; number of members and funds not stated.

There were a number of other Sos. dissolved this year of which we have few details beyond the names and location, viz. *Blooming Rose Lodge* (Preston); *Lily of the Spring Lodge* (Little Hulton, Lanc.); *Clickers, Leather Cutters*, etc. (Lond.); *Good Samaritan Lodge* (Portland Road, Lond.); *Calvar of Lebanon Lodge* (Newcastle-on-Tyne); *Young True Briton's So.* (Brierly-hill, Stafford); *Strugglers Lodge* (West Bromwich); *China Saucer Makers Burial So.* (Longton, Stafford); *Hermits Amicable F. So.* (Camberwell), etc.

Before the British Asso. Meeting held at *Norwich* this year, Mr. F. S. Corrance, M.P.,

read a paper on the "Social Condition of the Agricultural Labourer," wherein the subject of F. Sos. was made a prominent point of consideration.

The Rev. J. Y. Stratton pub. : *Suggestions for Legislation relating to F. Sos. ; and for a System of Ins. by means of the Post Office.* (See 1872.) Mr. Mortimer pub. in Exeter : *F. Sos. ; with Special Reference to the Western Provident Asso.* Mr. J. Drinkwater pub. a pamph. : *Mr. J. Tidd Pratt, and the F. Ins. Sos.* Mr. Bretherton, of the Royal Liver, pub. an *Essay on F. Sos.* There was also pub. : *The Ins. and F. Sos. Monthly Reporter.*

This year there was founded the *Surrey Deposit F. So.*—since 1872 designated the *National Deposit F. So.*, and with its change of name extending its operations beyond its orig. sphere. The "explanatory notice" prefixed to the rules shows with commendable brevity and clearness the aims of the So. :

This Club is estab. on the principles of a savings bank, the depositors in which agree to help each other in sickness and old age. Each depositor paying something towards his own relief out of his own deposit; and his fellow depositors finding the rest. . . .

It is a *Benefit Club*, because it provides: 1. Medical attendance. 2. An allowance in sickness [a member on joining fixes his own daily sick-pay, and this sum he must pay monthly to the common sick-fund of the Club]. 3. Old-age allowance at 70.

It is a *Deposit Club* or savings bank, because: 1. The members receive back annually to their own private account or *deposit*, also called their *rest*, whatever sums remain over from the common sick fund, after providing for the above objects, of sick, old age, and medical allowance; and they thus have all the advantages of a *sharing club*, without its risks. 2. They may pay into their own *deposit* or *rest*, any further sum they please, as into a savings bank. 3. They may withdraw any sum they please from their *deposit* as from a savings bank. 4. Deposits receive int. as in a savings bank. 5. The bal. of the *deposit* remaining at a member's death is paid to whomsoever he appoints.

The Club admits women as well as men, and persons of doubtful as well as sound health.

The working of this scheme is more simple than that of the *Abbots Ann So.*, of which we have given a full account under date 1831.

Each of the county agencies of this So. nominate 3 members to a general committee, which comprises in add. the president and vice-presidents, gen. treasurer, 5 trustees, and 5 members co-opted by the committee. Within the "county agencies" there may be district agencies wherever there is a sufficient number of members, and where an agent and medical officer can be procured; both county and district agencies having their respective sub-committees. There is, however, but one common fund in the hands of the gen. treasurer and gen. trustees.

In 1872 the So. had 906 members, with funds £2005. The progress is therefore slow. We shall speak of these Deposit Sos. again towards the close of this art.

1869.—By the 32 & 33 Vict. c. 61—*An Act to Protect the Funds of Trades Unions from Embezzlement and Misappropriation*—which enacts (1) that an asso. of persons having rules, agreements, or practices among themselves as to the terms on which they, or any of them, will or will not consent to employ or be employed, shall not, by reason only that any of such rules, agreements or practices may operate in restraint of trade, or that such asso. is partly for objects other than the objects mentioned in the F. Sos. Acts, be deemed, for the purposes of the 24th sec. of the F. Sos. Act, 1855, for the punishment of frauds and impositions, to be a So. estab. for a purpose which is illegal, or not to be a F. So. within the meaning of 44th sec. of this Act. . . . The Act was to be known as "The Trades Union Funds Protection Act," but was not to continue in force beyond the last day of Aug. 1870.

On the 9th April Mr. E. Richards moved the following resolution in the House of Commons: "That this Ho. is of opinion that the Gov. should introduce a measure to remedy the present insufficient state of the law in relation to F. Sos." He said the evils connected with these Sos. had forced themselves upon the attention of members of both Houses of the Legis.; and although Lord Devon's Return no doubt did some good by publicity, the evils still continued. The time was not far distant when Parl. would be compelled to regulate these Sos. by legislation. He trusted that the Gov. would be prepared to legis. on the subject, or at any rate to issue a Commission of Inquiry.

Mr. Bonham-Carter said that the Committees which had sat upon the subject of F. Sos. had in the first instance thought that it would be possible to apply stringent remedies to the abuses which were so rife; but further consideration had satisfied them that it would be better to trust to the good sense of the working men themselves. The result had at once justified the wisdom of that course, and had proved how well the working classes deserved the confidence which had been reposed in them. Nothing in fact could be more creditable than the way in which they had taken the rebuke that was administered to them. He did not deny that legis. might be desirable; but he would advise the Home Sec. to minimize that legis. as much as possible. *The case of Burial Sos. was of a totally different character. Indeed he could not conceive a more cruel thing than to speculate, as many of those Sos. did, on affection, grief, and ignorance.* He thought the Gov. would be rendering a good service if by any means it could aid in the discrimination between good and bad Sos.

Mr. Bruce (Home Sec.) admitted that the importance of the question could hardly be exaggerated: it affected millions of the working classes. Knowing the strong love of independence which existed among the working men, and how suspicious they were or any improper interference on the part of the Gov., he doubted whether it was in the power of Parl. greatly to assist the F. Sos. Parl. had indeed already laid down rules

conditions in each case, the respective amounts were £4 0s. 1d. p. member (varying to £4 14s. 3d., in the Caledonia Lodge, Greenock, to £1 4s. 1d. in the Robt. Hall Lodge, Leith), and £365 11s. 6d. p. Lodge. Among the smaller Orders the same head usually averaged less than those here named: the *Locomotive Engineers* also showing a higher average than the *Manchester Unity*, viz. £7 4s. 2d. p. head of 10 members. The Commissioners say: "Rough as is the test of cap. p. head, and being inapplicable to some classes of Sos.—and indeed to all new and rapidly increasing bodies—it is prob. sufficient to show that the average funds of the great bulk of the branches of Affiliated Sos. are inadequate to their liabilities" (sec. 122). This fact, we believe, in one of them, has only to be realized, in order to the taking of remedial measures. Again, the Commissioners say:

123. Varying as they do vastly in their magnitude and financial condition, the Affiliated Sos. are equally both from each other, and within themselves, in their moral characteristics. Of the two largest of them, the Assistant Regis. [Mr. Brabrook] says: "I believe that we get very great assistance from the governing bodies both of the *Odd Fellows* and of the *Foresters*, in looking after its compliance with law on the part of their branches." Sir Geo. Young (Assist. Commissioner) says, "Of the various Orders which have come under my notice there is none that can be said to occupy third place with the *Manchester Unity* of O. F. and the (London) Ancient Order of *Foresters*. I have visited no town, and but few large villages in which a Lodge or Court of these Orders was not to be found. The first-named was generally the longest estab.—the other has been the most strenuously developed of late years." "I desire," he says elsewhere, of the same two bodies, "to express a conviction formed by intercourse with their members in every place I have visited, that their claim to speak in the name of the present generation of working men, so far as concerns the largest section of the most intelligent among them, is well founded; and that their existence and prosperity, founded as it is upon the spontaneous energies and mutual help of individuals, without external initiative, and with but a minimum of Gov. aid, is in itself a valuable national possession. . . ."

Both Orders have "a model set of rules which guides all their branches and meets all their requirements"; and which has been examined and settled at the Registrar's office with the Sec. of each Order, "so that their rules are now certified almost without alteration. With many of the Orders this pleasant understanding does not, unfortunately, exist (*vide* evidence of Mr. Tompkins). The *Odd Fellows* are building Halls in many places, in view of avoiding meeting at public-houses. The *Foresters* seem to discourage this practice of building; but they are making other, and satisfactory arrangements for their meetings.

Again, nearly all the Orders admit members of all classes and occupations; sometimes under a minimum limit of weekly earnings: sometimes with higher charges for particular callings. The *Locomotive Steam Enginemen and Firemen's So.* is confined to the occupations named in its title; and several of the western Orders are practically confined to miners. Agricultural labourers are not included as a class—probably the regulation as to minimum wages acting as a prohibition: their own small earnings prob. being a more effectual one. The members of the Affiliated Orders are mostly of the artisan class, earning from 18s. to 25s. p. week. The *Foresters* have gone more into the agricultural districts than most of the Orders. The "occupations" of the members of the *Manchester Unity* will be referred to in detail when we review Mr. Ratcliffe's Valuation Report. [F. SOS., MORT. AND SICKNESS EXPERIENCE OF.] "The Educational status of the members of the different Orders varies enormously."

Regarding the "nomenclature" used by these bodies, "which is exceedingly various and peculiar," the Commissioners offer the following lucid explanation:

126. . . . The legal term "Branch" for the primary social molecules of which the Orders are composed is scarcely ever used. The branches of the *Manchester Unity* are termed "Lodges." This term is adopted by the various offshoots from the Order; by the *Druids*, and several other small Orders; and is by far the most widely prevalent. With the *Foresters* and their offshoots, the synonym for branch is "Court," except amongst the *Ancient Shepherds*, where it is "Sanctuary." The *Rechabites* have "Tents"; the *Sons of Temperance* "Divisions"; the *Ancient Romans* "Senates." The "Arch-Chapters" of the *Bolton Unity*, and other Orders, i.e. branches for ex-officers, have just been noticed. The general meetings of the *Manchester Unity* are "Movable Grand Councils"; of the *Bolton Order* of O. F., and of the *Ivorites*, "Ann. Conferences"; of the *Sons of Temperance*, "Ann. Sessions." The "Directors" of the *Manchester Unity*, *Ivorites*, *Alfreds*, and *Rechabites*, are replaced in the *Ancient Order of Foresters* by an "Executive Council"; among the *Nottingham* and *Bolton O. F.*, *Orangemen*, and others, by a "Grand Lodge"; among the *Sons of Temperance* by a "Management Committee"; and the *Manchester Unity*, the *Druids* and others, following the example of Freemasonry, have at their head a "Grand Master," who becomes a "High Chief Ranger" among the *Foresters*; a "Chief Shepherd" in the *Royal Order of Ancient Shepherds*, *Ashton Unity*; a "Patriarch" among the *Sons of Temperance*, etc.

Some instances of extraordinary nomenclature we have already given in connexion with the Order of *Cemented Bricks*, under date 1870.

We next come to the "Expenditure" of the Affiliated Orders, which is regarded as "the principal drawback to the affiliated system." The Commissioners here quote Sir George Young; we cannot do better:

. . . . The three-fold management of Order, District, and Branch, costs much more than that of a Local Club; not of course more by three times; but still more. The expense of sending delegates to the District and Gen. meetings is often a severe tax upon the branches. I find it very difficult to calculate the per-centage of expenditure on management, so as to compare the system in this respect with others; but I believe in a well-managed Lodge it will rarely be found under 16 p.c. of the total outgoings, if district and central expenses are included. This is higher than the average in "Large Ordinary" and Local Clubs; and about equal to that in County Sos. It would be still higher, but that the Secretaries are not, in general, paid the full market value of their services.

The [14th] Ann. Rep. of the Regis. of F. Sos. in E. and W. pub. this year contained a large collection of official and other documents on F. Sos., Burial Sos., Building Sos., Co-operative Sos., Savings Banks, etc.; many of which we have dealt with in their proper places. The most interesting return in the vol. is perhaps the following, relating to the number of ann. forms sent out and the number returned, with the results stated in counties :

County.	No. sent out.	Returned.	Complete.	Incomplete.	Funds. £	Members.
Bedford	242	135	115	20	54,153	11,854
Berkshire	160	77	59	18	23,248	6,273
Buckingham	168	111	95	16	53,318	12,677
Cambridge	201	116	97	19	46,274	9,692
Chester	773	378	307	71	184,354	59,642
Cornwall	231	91	77	14	52,304	9,000
Cumberland	131	57	48	9	28,980	6,639
Devon	513	250	211	39	264,279	44,926
Derby	536	290	270	20	138,239	26,075
Dorset	152	87	70	17	53,539	11,101
Durham	669	370	294	76	97,676	42,969
Essex	488	169	142	27	237,316	31,498
Gloucester	614	258	221	37	107,245	26,040
Hants	469	231	169	62	175,646	35,205
Hereford	67	33	26	7	19,681	3,948
Hertford	217	73	64	9	81,484	8,414
Huntingdon	101	42	37	5	15,344	3,156
Kent	593	393	302	91	160,982	40,512
Lancashire	2,666	1,513	1,230	283	624,579	534,413
Leicester	422	232	211	21	98,757	22,754
Lincoln	344	219	191	28	82,563	25,074
Middlesex	1,483	830	677	153	546,858	100,952
Monmouth	412	214	145	69	53,539	14,489
Norfolk	701	302	271	31	191,404	33,241
Northampton	361	216	192	24	100,005	17,302
Northumberland	367	208	169	39	73,546	28,158
Nottingham	355	174	152	22	58,867	16,778
Oxon	191	91	77	14	27,015	6,042
Rutland	34	15	15	—	9,027	1,856
Salop	326	167	144	23	106,092	17,256
Somerset	442	152	128	24	90,413	17,234
Stafford	1,211	681	535	146	271,321	94,732
Suffolk	476	168	151	17	154,188	17,318
Surrey	664	402	303	99	153,968	30,735
Sussex	340	174	146	28	75,313	13,831
Warwick	672	303	263	40	223,188	56,947
Westmorland	40	26	24	2	25,049	3,724
Wilts	211	82	66	16	70,341	9,567
Worcester	430	179	160	19	76,335	23,094
York	1,839	1,113	992	121	521,790	107,045
Anglesea	28	7	3	4	1,291	265
Brecon	139	49	35	14	12,838	2,616
Cardigan	77	17	17	—	4,719	1,354
Carmarthen	169	69	64	5	28,462	7,005
Carnarvon	58	30	25	5	10,937	4,961
Denbigh	147	54	39	19	14,712	4,189
Flint	114	51	38	13	13,209	4,350
Glamorgan	806	429	372	57	134,572	31,462
Merioneth	47	16	13	3	4,073	2,275
Montgomery	58	18	15	3	22,532	2,797
Pembroke	56	28	26	2	11,816	2,848
Radnor	14	5	5	—	5,393	680
Total	22,026	11,395	9494	1901	5,692,937	1,646,965
Too late	—	142	—	142	—	—
Returns without names of Sos.	—	726	—	726	—	—
Grand Total	22,026	12,263	9494	2769	5,692,937	1,646,965

When Estab.	Title of Order.	When Regis. or Rules Deposited.
	ODD FELLOWS, Nottingham Albion Order of (see Albion Order Odd Fellows, "Nottingham Unity")	
1832	" Anc. Noble Order of United, "Bolton Unity" [1832]	1862
	" National Independent Order of [1845]	{D. 1855 R. 1877
	" Grand United Order of [1845]	1842
	" Ditto ditto "Sheffield Unity"	
	" Ditto ditto "Leeds Unity"	
1832	" "Huddersfield Unity" of the Grand United Order of	D. 1872
	" British United Order of [1845]	1867
1820	" Improved Ind. Order of, "London Unity" [1820]	1853
1854	" Ditto ditto "South London Unity" (formerly S. London District of London Unity)	1874
	" Ancient Independent Order of, "Kent Unity"	1871
	" Independent Order of, "Norfolk & Norwich Unity"	1858
	" Ditto ditto "Norwich Unity"	1862
	[These two last are reported to have been re-united.]	
	" Norfolk and Suffolk United Order of	
	" Derby Midland United Order of	1860
	" Free and Independent Order of	1861
	" Ditto ditto "Wolverhampton Unity"	1860
	" Independent Order of, "Kingston Unity"	{D. 1858 R. 1868
	" Ditto ditto "Stafford Unity"	
	" Ditto ditto "Maidstone Unity"	1852
	" Ditto ditto "Irish Unity"	
	" Ancient Independent United Order of	
	" Albion Order of, "Nottingham Unity"	1868
	" Bridgnorth Reformed Order of	
1871	" Catholic Order of	D. 1871
	" Ilkeston and Erewash Valley Order (unregistered, see F. Sos. Commission, Rep. iv. p. xxx)	
	" Leicester Independent Order of (formerly I.O.O.F. "Leicester Unity")	1861
	" Leicestershire Seraphic Order of	1868
	" Leeds United Order of	
1869	" Yorkshire United Order of	
	" Ripley United Order of	D. 1872
	" Wolverhampton Loyal Order of	1852
	" Wolverhampton Loyal Reformed Order of	1840
	ODD SISTERS, Wolverhampton Reformed Order of [appears to be a companion So. to Wolverhampton L.R.O.O.F.]	1841
	OLD FRIENDS, Improved Order of	
	<i>Operative Plumbers, Provident Associated Order of</i>	
	ORANGEMEN, Grand Protestant Institution and Asso. of Loyal	1864
	PATRICIAN BRETHREN, Independent Order of, "Penrose Unity"	1866
1835	PEACEFUL DOVE, Honourable Order of the	D. 1859
	" Honourable Female Order of the	D. 1861
	" Independent Order of the (secession from Hon. O.P.D.)	
	PHILANTHROPIC ASSOCIATION, "British Unity"	
	PHILANTHROPIC SOCIETY (see Camborne Unity)	
	PHILANTHROPIC INSTITUTION, "Merthyr Unity"	D. 1857
	PHENIX, United Order of the Total Abstinence, SONS OF THE	1862
1862	PRUSSIAN HERMITS, Grand Loyal and Philanthropic (Faversham)	
1838	RECHABITES, Independent Order of, "Salford Unity" [1838]	1873
	" Ditto ditto "Bingley Unity"	1875
	" United Order of Female	D. 1856
	" Southern Counties Brotherhood, Hon. and Ind. Order	1873
	ROMANS, Ancient Order of	1852
	" <i>Grand Lodge of, Independent Order</i>	
	SAMARITANS (see Good Samaritans)	
	SAXONS (see Anglo-Saxons)	
1826	SHEPHERDS, Ancient Order of (2nd degree of Foresters) [1826]	1853
	" Loyal Order of Ancient, "Wisbeach Unity"	1848
	" Ditto ditto "Ashton Unity"	1868

When Estab.	Title of Order.	When Regis. or Rules Deposited.
	SHEPHERDS, Independent Order of Royal	
	SHEPHERDESSES, Loyal Order of Ancient, "South Wales Unity"	1874
	" " Ancient Order of, "Leeds Unity"	
	" " "Bristol Unity"	
	SHERWOOD RANGERS (see Foresters)	
	SISTERS (see United Sisters)	
	SISTERS OF PROGRESS, Independent Total Abstiners	
1844	<i>Star of the East (Framlingham, Suffolk) this date</i>	
	TEMPERANCE, Sons of	1857
1869	" British Independent Order of the Sons of	
	" Daughters of, Grand Union of Manchester	1871
	" <i>Sons of, Cornwall, Order of</i>	
	TESSERIANS, Independent Order of	1861
	" New Reform Order of the Ecclesfield Tesserian F. I.	1837
	UNITED BRETHREN, Cambridgeshire, Order of the	1869
	" " Catholic Order of (see Catholic Benefit So.)	
	UNITED BROTHERS, Ind. Order of, "Leicester Unity" [1840]	1855
	" " Ind. Order of, "Loughborough Unity" (late	1868
	" " Prince of Wales Lodge, "Leicester Unity")	
	UNITED BROTHERS AND SISTERS, Ind. Order of, "Leicester Unity"	1846
	<i>United Brotherhood, Imperial Order of, "Worcester Unity"</i>	
1844	UNITED SISTERS, Imperial Order of Loyal (Stafford) [1873]	
	WIRRAL CATHOLIC Benevolent Society.	
	WORKMEN (see British Workmen)	

Note.—For the compilation of the preceding T., in the complete form here presented, we are indebted to Mr. Geo. Cheney, of the Record Depart. of the Registrar of F. Sos. He will find reward for the labour bestowed upon it, in the knowledge of the service it will afford to all future inquirers into the history of F. Sos.

The titles printed in *Italics* are added at the moment of going to press, and have not undergone the careful sifting to which the other portions of the T. have been subjected.

2. Ordinary Large (or General) F. Sos.—These are constituted entirely different from the Affiliated Sos. In an ordinary large General F. So. the management is in one location, with members (and sometimes agents) scattered over one or many districts. The agents are appointed to obtain members and collect subs.; and their remuneration is usually a per-centage on the amounts collected. The members, however many there may be in any given district, have no voice whatever in the management. But in several of the larger Sos. there are no agents. The members all pay at, or remit to, the head office.—Vide *Hearts of Oak*.

These Sos. are not numerous. It is supposed there are not 100 of them in the U. K., in the whole; and the leading ones may be counted on the fingers. The best known of these, placing them in the order of their formation, are:

1. The *London F. Inst.*, Farringdon Street, City. It was estab. in 1824. In 1871 it had 2261 members, with funds in hand £26,700. The contributions are graduated according to age. The different funds are in theory kept separate; but in practice the burial fund having a surplus, and the sick fund a deficiency, the bal. of the former has been applied for the purposes of the latter: and there has been no great injustice in the case, as the members are required to belong to each fund.

There are branches, and agents from these, who are paid 3d. p. member; and are appointed by the members of the branch. The income in 1870-1 (not including interest) was £4400. The cost of man. was £508, of which £6 15s. was for canvassers, and £50 12s. 3d. to branch agents or country receivers. The income of the man. department was £584 10s.—but this included £76 for rent, part of offices being let off. The cost of man. upon the income was 11½ p.c.

2. The *Royal Standard*, founded 1828. Of this we have given an account under this date; see also 1841. For further details see the Hon. E. L. Stanley's Rep. 1874, p. 132.

3. The *Royal Oak Benefit So.*, estab. 1837; bus. carried on at the Black Prince, Chandos Street, Covent Garden, Lond. In 1870 it had about 2000 members, with funds of £26,000. The contributions are 48s. p.a. p. member. The income from contributions in 1870 was £4686. The cost of man. £369, or less than 8 p.c.

4. The *United Kingdom Benefit So.*, estab. 1839; held at 27, Great Ormond Street, Lond. The So. had in 1871 about 1388 members, of whom more than one-half resided in Lond. The funds were £7419. The constitution of the So. resembles that of the *Royal Standard*. The contributions are 42s. p.a. The accounts are audited by 4 members appointed at a general meeting. The audit is said to be a strict one. Very few members withdraw from the So. Its increase of members has been rapid of late

years. The income from contributions in 1871 was £2767; the cost of man. £290, or about 10½ p.c.

5. The *Hearts of Oak*, founded in Lond. 1841. This is by far the largest of this class of Sos. We have given an account of it under the date of its estab.; and have nothing further to add.

6. The *United Patriots National Benefit So.*, established in 1843, of which we have given a full account under this date.

The *Friend-in-Need* was of this class; we have given an account of its disgraceful management under date 1829. Another So. of this class is the *Grand Hope F. So.*, whose head office is at the Bell Tavern, Old Bailey. It was founded in 1820; and in 1871 had nearly 1900 members, with funds of £8212; and an income of £2126. The *Victoria Benefit So.* is of this class, and is conducted with great prudence and ability. The same may be said of the *Mutual Provident Alliance* (see 1846). In each of these last-named Sos. life bus. has become the more prominent feature.

The six Sos. first specifically named in this class had in 1872 about 46,198 members, with funds of £230,869.

Sir Geo. Young says in his Rep. (pp. 5-6):

The *Hearts of Oak* and *Royal Standard* are examples of Sos. of the most completely centralized type, having no agents or recognized agents out of Lond. Their members transmit contributions by P. O. Order, and receive sick pay and benefits in the same manner. Their affairs are managed by committees sitting in Lond.; and the only control possessed by the members generally is exercised through the ann. gen. meetings. It is obvious that the country members of such a So. can have little or no voice in its affairs; but there are not many points in which their interests can be antagonistic to those of the Lond. members; and the chief bus. of the meeting is to elect the Committee, which must necessarily be composed of Londoners. In the Committee lies the real power to manage the So.

The great majority of Sos. in this class employ recognized agents, whose remuneration is a considerable tax on their funds; although I cannot say it appears excessive, in consideration of the services they render.

It is noticeable that the dispensing with agencies on the part of the two Lond. Sos. above named has enabled them greatly to reduce their expenses, and has given them a certain position as contrasted with lesser Sos. more dependent on the arts of advertising. At the same time, that agents are a convenience to the members is proved by the existence of unrecognized agents, who, at the cost and risk of the members employing them, collect and transmit their contributions to head-quarters. Complaints have been made in each case of the refusal of the Committee to recognize these agencies; but as made by members, they resolve themselves into the wider grievance of want of voice in the management; and it is by no means clear that if delegates were permitted to represent absent members at the gen. meeting, it would be beneficial to recognize the agent in that capacity. The voice of those who do not employ an agent would naturally be given against any such delegation; and it is not to be denied that there exists a feeling, quite as worthy of respect, against the employment of an agent (who, as was once said to me, "is apt to become master") as is the feeling above noticed, of the convenience of the arrangement.

The object for which popularity in the management, with the security which it affords, has been sacrificed, is generally stated to be the greater cheapness with which a So. with such simple organization can be carried on. This object is attained in the best of these Sos., the expenses of man. falling much below those of the *Affiliated*, and even those of the *County Sos.* The expenses of the former are difficult to estimate; in the latter 10 p.c. on the total expenditure appears to be a common average; whereas in the *Hearts of Oak*, a So. of 25,510 members, and £76,842 in stock, the figures given amount to only 6 p.c. on the total expenditure. In the Sos. employing agents this per-centage is of course considerably exceeded; and there appears little difference between them and the *County Sos.* It is, I fear, impossible to say that this advantage of cheapness is, as it should be, characteristic of these Sos. as a class.

After pointing to the unsound condition of several of the Sos. of this class, he then proceeds:

It is impossible to deny that these Sos. have a sphere to fill, in view of the numbers who have joined them. Their members are mostly of a high degree of respectability; artisans, tradesmen, domestic servants and others, who, as has often been said to me, dislike "nonsense" and mixed company of club nights, and look for an investment of their savings on purely bus. principles.

As a class these Sos. are regis.

3. *County Sos., and other patronized Sos. not purely Local.*—These Sos. are in the main peculiar to the Eastern and Southern portions of Eng. It is however obvious, as the Commissioners remark, that the merely geographical designation of "County So." may cover almost every variety of organization: and, accordingly, within their limits some County Sos. approximate more closely to the "Affiliated," others to the "General" or even the "Collecting" type. "One common feature however distinguishes them: they have been, we believe, invariably estab. not by the working classes, but for them." Some of them, as Sir George Young points out, "have been founded in pursuance of resolutions taken by the Magistrates at Quarter Sessions as a means of improving the condition of those classes which are in part dependent on the rates, and with the hope of eventually superseding the Poor Law by their means." Hence he classes with them "all Sos. in which the management is wholly or in great part in the hands of honorary members, deriving no benefit from its funds:" which, "when they succeed, have a natural tendency to throw out branches, and to extend the benefits of their reputation to neighbouring villages."

The *County Sos.*, meaning thereby those extending over the whole area of a county, but confined to it, appear to be very few in number, and the Commissioners considered they were probably all included in the following list, which we arrange in chronological order:

Date of Estab.	Name of Society.	Date of Return.	No. of Members.	F
1818	Essex Provident	1872	9315	£76
1825	Hampshire Friendly	1872	6322	46
1828	County of Kent	1872	850	25
1828	Wiltshire F. So.	1872	7130	31
1832	County of Rutland	1872	196	5
1838	Herefordshire F. So.	1871	1088	10
1842	General Benefit for Town and County of Cambridge and Isle of Ely	1870	384	5
1847	Dorset F.	1872	2732	11
1850	Nottingham County F.	1872	103	1
1851	Shropshire Provident	1872	916	8
1872	Berkshire F.	1872	161	
Totals			29,197	222

We have given a detailed hist. of several of these Sos., especially of the two, the *Essex* Prov. and the *Wiltshire*, under dates of their estab. They are all of the character. The figures of some of them have grown larger since this date.

The following Sos. (among others) confine themselves to geographical areas more than the County. We give them, as far as we can ascertain the facts, in chron. or

Date of Estab.	Name of Society.	Date of Return.	No. of Members.	F
1825	North Devon Provident Inst.	1872	411	£20
1827	North Somerset	1871	955	13
1830	West Suffolk F. So.	1872	871	16
1832	South Bucks	1872	900	13
1837	West Gloucestershire	1872	938	8
1841	South Oxfordshire Friendly	1871	—	1
1846	West Surrey General Benefit	1872	927	7
1847	North Staffordshire Provident	1872	1188	15
1847	West Middlesex Prov. and F.	1872	159	1
1856	East Gloucestershire	1872	330	1
Totals			6319	100

Of several of these Sos. too we have already given a detailed hist. under the their estab. In many cases they have made great progress even since the date of the now under review.

In the Eastern Counties there are many similar Sos., occupying as the area operations the "Hundred"—sometimes extending into two or more such divisions. A type of these the Commissioners give the following :

Date of Estab.	Name of Society.	Date of Return.	No. of Members.	F
1826	Aldham and United Parishes (Essex)	1872	2094	£1
1836	Margaret-Roothing and District F. So. (Essex)	—	572	
1837	Tendring Hundred (Essex)	—	933	1
1839	Hundred of Hinckford (Essex)	1872	—	
1844	Hundreds of Loddon and Clavering (Norfolk)	1872	132	
1856	Hartismore and Hoxne [formerly Loes, Hoxne, etc.]	1871	219	

There are some other extended Sos. of this same class, which however the Commissioners place under another head, as being patronized Sos. more of the County type

Date of Estab.	Name of Society.	Date of Return.	No. of Members.	F
1827	Reepham Provident (Norfolk)	1872	359	£1
1828	Stoke and Melford Union Asso. (Suffolk)	1872	1338	3
1832	Dunmow F. So. (Essex)	1872	1128	2
1840	Clifton F. So. (Gloucester, urban)	1872	395	
1843	Stoke Holy Cross (Norfolk)	1872	588	
1848	Windsor Royal United Benefit So. (Berks)	—	698	
1850	Saffron Walden, etc. (Essex)	1872	457	

The Commissioners hereon remark :

186. It would be obviously impossible to enumerate without most minute inquiry more than a very small proportion of the Sos. of this description, shading off as they do imperceptibly, as respects area, into the purely local bodies ; and as respects their working, into the non-patronized bodies. There is, however, another group of Sos. constituted on a smaller scale yet than those hitherto mentioned—the “Becher Clubs,” still not uncommon in the Midland Counties—the area of which is about that of the Poor Law Union : and which thus approximate to the County Sos. through their limited area, as well as through their generally hon. man.

Among these Mr. Stanley, one of the Assistant Commissioners, had particularly named the following :

Date of Estab.	Name of Society.	Date of Return.	No. of Members.	Funds.
1829	Wilford F. Inst. (Notts)	1872	107	£1968
1838	Stratford-on-Avon (Warwick)	1872	287	5779
1838	Alcester Becher Club (Warwickshire).....	—	225	2548
1842	Stewpony Becher Club (Worcester).....	1872	263	6142

Of the *Stewpony Club* we have given some details under the date of its estab.

To these latter may be assimilated the “Grantham Union Self-Aiding Medical Club,” extending over 23 parishes of the Grantham Union, the membership of which is limited to agricultural labourers—no Parl. voter being admissible as a benefit member—the man resting with the hon. members.

The Commissioners further remark :

188. The above-given figures do not of course admit of being totalized ; but we may say that the first 2 classes, forming in a more especial manner the County So. groupe, cannot reckon as many as 40,000 members ; and that the membership of the whole class prob. does not much exceed that of the “General” Sos.

189. The *Western Provident* is, so far as we are aware, almost the only So. claiming to rank with those of the County type, which extends over more than one county—except the recently formed *National Deposit F. So.* But since the latter belongs, as its title shows, distinctly to a class which will have to be treated of further on, we shall not discuss it here. We may, however, at once observe that one of the Sos. above named—the *Surrey Deposit* (out of which the *National Deposit* has grown)—belongs also distinctly to the Deposit class, and that several other County Sos., as the *Hampshire* and the *Wiltshire*, have also deposit branches.

Sir George Young points out that whilst the “County Sos.” and their congeners have branches like the “Affiliated” Sos., they yet retain “all the funds and most of the man. in the centre,” their branch committees being thus “mere shadows,” and often consisting “in reality of the paid agent alone.”

It follows, as a matter of course, that complaints of want of interest in the So. on the part of the members are common among the agents ; and of insufficient voice in the management, among the members themselves. These appear to be inherent and inevitable. It appears essential that in a non-local So., recruiting among the most widely scattered and least educated portion of the pop., the popular element in its man. should be reduced to its minimum. It is proper to observe that care seems to be taken to avoid invidious interference in individual cases. When such become the subject of discussion at a committee meeting, the hon. members present usually abstain from voting. Mr. Cartland (Windsor Royal United Benefit So.) considers that the presence of gentlemen in the man. of a So. tends to make it more steady, but not necessarily more strict ; and this is confirmed by opinions from outside. *Patronized Sos. are, however, obliged to be strict, since their constitution does not exist so strong a feeling in their members against imposition. Many have failed from this cause. . . .*

He (Sir Geo. Young) continues to say that two of the drawbacks to the rapid advancement of the County Sos., viz. “the absence of puffery—upon which the success of many undeserving Sos. has been entirely founded ; and the high rates, which, under actuarial advice, they find it proper to exact,” cannot be considered as real objections. Another objection, which is, however, not peculiar to them, but to which every really successful So. which accumulates funds is liable as well, arises from the desire to divide the accumulated funds.

And it is often seriously believed by the members . . . that the ins. fund stored up by themselves, and their predecessors, to meet the inevitable future claims of the existing generation, is a spoil, taken by craft from their pockets ; reserved for the advantage of “Government,” to whom it may perhaps have been lent : or of posterity, to the reduction of wages ; or in some mysterious way for the benefit of the rate-paying part of the community. . . .

The local limitation, whether to a county or other district, is a real drawback, which is felt by these Sos.

The facilities of subscription at a distance are not always so great as they might be, and there can be no reason why what is done by Lodges of Odd Fellows for sister Lodges should not be done by one County So. for another, to the extent at least of receiving and forwarding subs. and payments, and perhaps of an introduction of the “clearance” system, or complete transfer of membership. It is unnecessary that subs. should be paid more than once a quarter, and quarterly payments may be effected, as in the Collecting Sos., which do not employ agents, through the medium of the P. Office. The almost universal interest taken by the Clergy in these Sos. suggests means at least as good as any other So. has to rely on, for preventing imposition by members at a distance. In the absence of such provisions, liberal rules for the surrender and purchase of the rights of membership are peremptorily needed. *A conference between managers of County Sos. could not fail to afford valuable hints in this direction.*

The benefits offered by a County So. are more various, both in kind and in amount, than is found necessary, or even approved of, in Affiliated Sos. This is, however, in itself an advantage, and can give rise to no objection, so long as the T. have not thereby been made too voluminous. In some Sos.—the *Western Provident*, for instance—it has been found necessary to offer less, that is, to pub.

a selection from the T., for the use of heads not accustomed to hunt for what they want among many figures. As a rule, too, it is not necessary to offer benefits—the sick-pay and death benefit, at all events—in separate lots. Every labouring man will gladly subs. for both, and would rather be saved the trouble of deciding anything beyond the gross sum he is to pay p. month. If the option is too extensive, he only feels himself the more at the mercy of the agent who enters him.

The further obs. of Sir Geo. Young on the "County Sos." may be consulted with advantage by those engaged in their management.—*Vide* his Rep. p. 10.

Note.—With the view of throwing further light upon the Sos. embraced under this and the two following heads, we propose to prepare an abstract of the Sos. embraced in the Rep. of the Chief Registrar pub. in 1866—see that date.

4. **Local Town Sos.**—The Commissioners found it difficult, if not impracticable, to estab. any specific distinction between this and the next, or "Village" class of Sos. Each class is found in fact to embrace representatives of other classes yet to be noticed. "The Town Sos. are perhaps more likely to bring together intelligent groups of members; the County ones to obtain supervision of persons belonging to a class superior in education to the members themselves." "The largest of the Town Sos. (not of the dividing type) are scarcely distinguishable, except in point of extension, from the general Sos."

The most important group of Town Sos. are found at *Birmingham*; among them these, chiefly originated by and associated with the various religious bodies of that thriving place:

Date of Estab.	Name of Society.	Date of Return.	No. of Members.	Funds.
1819	Old Meeting Friendly Fund	1872	438	£6,690
1825	Birmingham Unitarian Brotherly So.	1872	481	8,567
1833	Birmingham Gen. Prov. and Benevolent	1872	5005	33,193
1835	Christ Church Prov. Inst.	1872	796	5,090
1836	New Meeting Prov. Inst.	1872	882	8,547
1841	Cannon Street Male Adult Prov. Inst.	1872	7733	52,943

Other towns have such Sos., and among these may be specifically named the following:

1837	Wolverhampton—St. Paul's Prov. So. (Church of Eng.)	1872	444	£7,387
?	Macclesfield Church of Eng. F.	—	997	6,693
1844	Chelmsford Provident	—	2451	20,442

With which may be classed the:

1817	Devonport Philanthropic Union (late Plymouth Dock So.)	—	600	£4,082
1832	Bath Friendly	1872	1000	11,098
1846	Brighton and Sussex Mut. Prov.	—	? 1000	36,748

There are also several Sos. of this class in *Scotland*, viz.:

1807	Glasgow "Thistle and Rose" So.	—	238	£9,372
1828	Edinburgh School of Arts F. So.	—	387	15,447
1832	Western Friendly of Glasgow	—	1008	9,562

Several of the preceding Sos. have been noted by us, in more or less detail, under dates of their estab.; and we think the *Chelmsford Prov.* should not have been included with the Town Sos., as it has agencies or branches in various parts of the county of Essex.

The Commissioners think that the most interesting samples of the class are to be found at the other end of the scale of magnitude—in those Sos. which by good and careful man. (prob. aided by a reluctance on the part of the members to come upon the sick fund) have been able to succeed with a very small number of members, sometimes actually limited by rule. Instances of successful small Sos. in London are then quoted. In *Exeter* there exists a number of Sos. with limited numbers of members, ranging from 61 to 80. Thus the *Exeter Philanthropic So.*, founded in 1825, is limited to 61 members. In 1872 it had 60 members; funds £1147. It appears to have been the only prosperous one of its class in that city. The *Devonport Dockyard Mechanics F. Union*, founded 1819, had 89 members in 1872, with funds £1616. The *Oxford Phoenix Benefit So.*, founded 1805, had in 1872 but 22 members, with £672 of accumulated funds. In *Sheffield* there were a group of 9 rich and well-conducted old-estab. Sos., with a collective membership of 1253, with funds of £39,488—or £31 10s. 4d. p. head; the *Revolution So.*, founded 1782 (regis. 1796), with 86 members, and funds of £6662; the *Rodney So.*, founded 1782 (regis. 1794), with 41 members, and £2369 in funds; and the *Rawson So.* (regis. 1828), with 57 members, and funds of £2086. Mr. Stanley adds: "But these Sos. do not attract members as much as might be expected; some of them from their wealth discourage new members, but even those that admit them find a want of popularity." The Commissioners say regarding the F. Sos. of this class:

211. Separate groups might perhaps be formed among Town Sos. [1] for those which are connected with particular religious bodies; and perhaps, specially, with particular churches or chapels; [2] for those which are connected with Sunday Schools; and [3] for those which are estab. on temperance

principles. But although the denser pop. of Towns affords greater facilities for the formation of Sos. of special composition, they are to be found also in villages. Of the first group, indeed, several instances have already been mentioned among the large Town Sos. . . . The Temperance Sos. not connected with the Temperance Orders appear to be insignificant. The Sunday School Sos. have a more distinctive character, and may deserve to be specially noticed.

212. The Regis. of F. Sos. reckons, indeed, "Sos. of Sunday Scholars" as one of the 6 classes into which he divides F. Sos. in general. But many of them are confined to burial purposes, and might therefore be included among Burial Sos.; whilst he himself will be found occasionally retaining others among ordinary F. Sos. Nor can they be classed apart with other juvenile Sos., without violence, since many of them are for adults. As these are chiefly to be found in towns, we shall treat of them (except those which are confined to burial purposes) under the present heading. They are mostly in *Lancashire* and *Cheshire*, with a scattering in other counties.

The Hon. Mr. Stanley in his Rep. (p. 101) says:

Among the Sos. which are specially numbered in East Lancashire, are those in connexion with Sunday Schools. They are first of all for the sake of the children attending those schools: and are apt to grow into Sick Clubs for adults who have formerly been attendants as pupils or teachers. They are naturally held at the school; and the man is in the hands of those who conduct the school. The contributions are, as a rule, very low; and an actuary would be surprised how they get on at all. But they manage to succeed very often to a wonderful extent: for they are very cheaply man., and the members are, of course, amongst the most steady, provident, and respectable. The man. too is generally in the hands of superior persons, and they are apt to get their money out at a good rate of int.

There are many of these Clubs at *Oldham*. They are often divided into classes according to the age of the members, the contributions and benefits rising with their growth. . . .

He particularly mentions the *Baptist Sunday School Sick and Burial So.*, with 321 members—133 male and 188 female—divided into four classes, with funds of £386 odd; the *Independent Methodist Sunday School So.*, which in 1872 had 602 members and funds of £631; the *Oldham Sunday School Union F. Sick and Burial So.*, with 178 members, all males, and funds of £316; and the *Townfield Sunday School Sick and Funeral So.*, with 401 members—187 males and 214 females, and funds £213; adding: "These 4 Sos. have an income of £488 from contributions, and spent in the year's man. £47, or less than 10 p.c.; but of the £47, £17 was for printing, most of which was an exceptional expenditure." The Commissioners suggest that "we have no data from which we could conclude that these Sos. are financially sound."

After referring to some of the Sunday School F. Sos. in *Manchester* and in *Birmingham*, the Commissioners give the following summary deduced from the Rep. of the Regis. of F. Sos. "for 1872":

Counties.	Societies.	Sos. stating members.	Funds.	Funds of Sos. stating members.	Members.
Cheshire	3	2	£ 1,642	£ 1,278	129
Lancashire	54	47	35,924	32,224	11,359
Yorkshire	7	6	2,701	2,435	421
Total	64	54	40,267	35,937	11,909

"To these should be added the Sos. classed among Burial Sos. by the Regis. Rep. for 1872—the *Old Chapel Sunday School Burial So.* of Dunkinfield (Cheshire); the *Wesleyan Sunday School Burial So.* of Blackrod; and the *Sunday School Burial So.* of Brindle in Lancashire—having in all £376 funds; and 2 of them returning 260 members; and raising the total membership to 12,169, and the total funds to £40,643. Some other 'School' Burial Sos. may also very likely be 'Sunday School' ones."

The two largest of the Sos. of this class, alike in members and funds, are the *Baptist Sunday School Sick and F. So.* of Accrington, with 808 members and £3437; and the *Trinity Church Schools Sick and Burial* at Over Darwin, with 967 members and £3429 funds. The Sos. of this class will be again spoken of under head No. 6 [*Special Trade [or Class] Sos.*]. See also note at end of Class 3.

5. **Local Village and Country Sos.**—The Commissioners include in this class not only Village Sos. strictly so called, but all Sos. confined to one locality, "and providing for the wants chiefly of a Country as distinguished from a Town pop." Such Sos., they consider, may be divided broadly into two sub-classes—to be traced, though not with equal distinctness, in the Town Sos.: (1) Sos. which meet at a public-house or beer-shop; and (2) Sos. which meet away from these: the latter being almost invariably under hon. man. or patronage. "A large proportion of the former indeed, in Town and Country alike, are on the sharing-out principle; but such proportion seems, south of the Tweed at all events, to be growing smaller." These "Dividing Sos." will be treated of under their proper head.

Sir George Young says of the Sos. of this class:

In the South of England there are not many villages without a Club. There is hardly a village or hamlet of 20 houses and a beer-shop that has not its Club. There are hardly any where one or more Clubs have not failed at need, and disappointed their members, within the memory of persons now living. The number found competing against each other in a single village is often remarkable. Thus in *Cottenham*, in Cambridgeshire [Agricultural; pop. (1871) 2496], I found besides two Lodges of the *Manchester Unity of O. F.*, Lodges of *Shepherds* and *Shepherdesses* of the *Wisebeach Unity*; a branch of the *Cambridge Town and County Club* [the *General Benefit So.*], promoted by the

clergymen; a Club at the Brit. School, composed of old men, attempting with the help and advice of an active resident medical gentleman to carry on an old Club, recently broken up; a gathering of *Ancient Patriarchs*, with agents, belonging to the London So. of that name; and 2 ordin. public-house Clubs—9 in all. Only one of them—a Lodge of Odd Fellows—had over 100 members. There were not more than 500 members in them all together: 50 of these women; and the average is therefore under 56. Similarly at *Waddesdon*, a large village in the Vale of Aylesbury [agricultural; pop. (1871) 1505—or, including *Wescott* (296) and *Woodham* (37), a total pop. of 1838], there are 6 Clubs—4 are 7-year "Sharing-out" Clubs, one of them composed of farmers and tradesmen exclusively; of the remaining 2 one is got up and patronized by the farmers, the other would have been a Sharing-out Club but for the Registrar. There are only 350 members in the 6 Clubs—the largest containing about 90. The average is therefore under 59. In many other villages of no great size I found 3, 4, or 5 Clubs: the rivalry of the beershops being the originating cause, far more than any jealousies among the men themselves.

In the Union Regis. District of *Ashby-de-la-Zouch* (Leicestershire), pop. 31,544 and agricultural, Mr. Stanley found a total of 58 F. Sos. (including branches of Affiliated Sos.); having a total number of members (omitting 1 So. where the numbers were not given) of 3715. Of these Sos. only 30 were regis. There were but 11 Sos.—5 regis., 6 non-regis., having together 693 members—which did not belong to the Affiliated Orders. Thus about 11·78 p.c. of the pop. were members of some So.: 9·58 p.c. belonging to the Affiliated Orders; and 2·20 p.c. to the isolated Sos. "A similar examination of a radius 6 miles south of *Trent* from *Nottingham*, in a purely agricultural district (the pop. of the district, however, not being stated), gives a total number of Sos. and Branches of 26, of which 16 are regis., and a total membership of 2308; but here the Orders are in a great minority, comprising only 8 out of the 26 Sos., with 407 members out of the 2308." In the *Stratford-on-Avon* Union (pop. 22,374), 21 Sos. or Branches were found—of which 2 at least were unregis.—with 2075 members, making 9·27 p.c. of the pop.; of these 922, or less than one-half, belonged to the Affiliated Orders. In the *Penrith* Union (Cumberland), with a pop. of 22,322, Mr. Culley found in 1871 10 local Sos. or Branches (of which 2 were unregis.), but the number of members was not stated. In the *Glendale* Union (Northumberland), with a pop. of 13,211, there were 6 Sos. (4 being unregis.), having 1007 members—being 7·62 p.c. of the pop. In *Cheshire* there existed a group of 9 "old-fashioned Sick Clubs with the yearly feast," which had an aggregate of 1996 members, with funds of £17,730—being £8 18s. 4d. p. member, comparing well with the best Affiliated Sos. and being higher than the average of County Sos. The number of members averaged 222 p. Club.

In none of the instances quoted are the members of Collecting Burial Sos., belonging to other districts, included. These would bring up the per-centages of members to a much higher figure.

Regarding the prevalence of unregis. Sos., Sir Geo. Young says (Rep. p. 16):

Regis. is now pretty generally approved: though there will always remain Clubs which *derive a certain popularity from being unregis.*; and therefore it can never become universal. This approval must, however, be taken in a qualified sense. Perhaps in all the purely agricultural Clubs a free vote, taken upon the simple issue whether they would prefer to be regis. or to have nothing to do with the Gov., would result in a very large majority for the latter alternative; but these Clubs are governed by the few most intelligent or strong-minded members, and with them the advantages of regis. have come to be appreciated. . . . The old jealousy of the "Gov." I think it may be concluded, though still unreasonably strong, has yielded, and is yielding, to the results of education.

Sir George had found it difficult to institute comparisons between Districts as to the stability and prudence observable in the arrangements of the popular Clubs, "chiefly on account of the disturbing influences of the larger non-local Sos." It would often appear that the attractions of a widely-extended County Club, or a well-managed district in some popular Order, had drawn from the purely local Clubs so many of the most intelligent men, as to leave them comparatively in a very benighted condition. "It would of course be a mistake to conclude for this reason that the neighbourhood was a backward one as compared with others." In *Banbury* (Oxfordshire) he found the district "swarming with local Clubs" of a good average character, the majority being regis. In *Buckinghamshire*, *Hampshire*, *Sussex*, and *Devonshire*, the local Clubs appeared to be rather below the average. In *Norfolk* and *Suffolk* there were a good many capital Clubs, not exactly of the popular sort; but more or less "patronized." In *Essex* there were several high-class Clubs; but the pure Village Clubs were, perhaps, "for that very reason, lower in the scale than I had found them anywhere else, and must prob. be looked upon as residuary." The mining districts of *Cornwall* and elsewhere "form a study by themselves. So do the straw-plaiting districts of *Bedfordshire* and *Buckinghamshire*, in respect of the importance of the *Female Clubs* to be met with. In *Cambridgeshire* and *Lincolnshire* I found the popular Clubs of rather a higher class than in the south. Other counties afforded no special matter for remark on the general condition of their F. Sos." He adds:

As an instance of the improvement which time is effecting, I will mention the general discredit now attached to the old distinction between "lie-a-bed" and "walking" sick-pay, which I only found standing in *Somersetshire* and *Devonshire*. It is a bad rule, leading to much imposition, and likely, if it could be strictly enforced, to increase the sickness rate, by keeping convalescents in bed. Its disuse appears to have been largely due to the advice and influence of the medical profession, whose share in the support of F. Sos. and encouragement of what is for the better, it is not easy to overrate. There still exists, however, among the agricultural pop. a profound ignorance and consequent distrust even of the simplest economic results now estab. as rules for carrying on a sick and death benefit So. without financial mishap. Their pecuniary resources being at the same time very slender, and the

traditions of so-called good fellowship and expensive feasting by no means extinct: it follows that the maintenance of a local Club in the agricultural districts presents more and greater difficulties for solution than that of a Town Club. In one respect only are the conditions more favourable: the sickness experience, judging by the testimony of secretaries who have had to do with both classes, is less in amount and more equable in occurrence; and against this must be set off the increased duration of life among the superannuated or pensioner class.

In making inquiries among those connected in the man. of F. Sos. as to improvements, he found the idea of "alms-houses" for the aged members very popular. In one case, that of the Truro *Old Friends* So., more usually called (after its founder) Dr. Carlyon's Club, the experiment had been tried. Here 12 cottages, "purchased partly by subs.—Lord Falmouth giving the land, and Lady Falmouth £150 towards the building," had been obtained—

The intention was to use them as alms-houses for decayed members, and there are some free inmates; but in the result it has been found necessary to let the majority at low rents: the proceeds being appropriated first to repairs, and afterwards to relief by way of ordinary benefits. My informant considered an annu. fund a better thing, and would gladly "see the subs. for annuities made compulsory on all F. Sos." The tenancy of cottages owned by Clubs is often treated as a piece of patronage to be bestowed on "deserving" members, and this tends almost invariably to disputes. Of course the building of cottages by way of investment must be recommended or disapproved on its own merits; but in any case it shares with the alms-house system the objections here noticed.

The Hon. Mr. Stanley—whose conclusions in the main conform to those of Sir George Young—says:

Another thing which has injured Village Clubs has been the injudicious administration of Poor Law relief. In some parts of Eng. the guardians have drifted back to the abuses of the old Poor Law; and the expectation of parish relief on easy terms in old age has much encouraged many Sos. to an ann. division of their funds.

Sir Geo. Young, reviewing the general backwardness of Village Clubs, remarks as follows:

It is in the country villages, if anywhere, that the need of add. legis. to improve the character of F. Sos. has become apparent. Whatever cause for apprehensions may exist in the bal.-sheets of the larger Town Sos., and for distrust in the constitutions of the smaller, it is impossible to deny that they may succeed in rectifying their remaining faults, after they have already succeeded in rectifying so many. The Club of our country villages is a growth of the same stock, and is quite as genuine a product of the soil; but as an organization of thrift it has never been a healthy plant, and the improvements which it seems capable of effecting for itself, without extraneous aid, fall far short of what is peremptorily needed.

The Commissioners say (p. lxiv):

In speaking of Country Sos. we have not adverted to *Scotland* or *Ireland*. In the latter country the type is absolutely non-existent in villages, and apparently also in the smaller towns; the only body of the kind named by the Deputy-Registrar having proved undiscoverable by our Assistant Commissioner. In *Scotland*, as far as may be judged by Mr. Culley's Rep., nearly the whole class is dividing, or is unregistered; and the few regis. samples that he has found are dying out. Such is the *Swinton* F. So., in Berwickshire—an old So. (estab. 1810, and regis. 1831), with 110 members, and £461 15s. funds. It had 178 members as late as 1847, and young men do not join it; nor can we be surprised at this when we find that sick allowance only begins after 4 years' membership. Thus, although the quarterly contribution is only 1s. 6d. (besides entrance fees if the member is above 21, and death levies), a man must have paid at least £1 4s. before he can receive a penny of sick pay. It is true that an unregis. So., in a neighbouring parish—"the *Hulton Friendly*"—requires a still longer period of probation: 5 years.

The So. which is put forward as the most remarkable type of this class—or, as the Commissioners say, "of the whole body of F. Sos. as respects financial prosperity"—is the *Hitchin F. Institution*, founded in May, 1827. In many respects it resembles the "County" type of So.—having hon. members, who make up a considerable proportion of the board of man. Its operations are limited to a radius of 8 miles from Hitchin (Herts). Its benefits are sickness pay, deferred allowances, payments on death, and endowments—which may be combined, so as to form 10 classes. The sum to be insured in sickness is not to exceed four-fifths of the weekly earnings of the members; and no benefit is payable until after the expiration of the first year's membership—unless a fine has been paid on admission equal to 1 year's contribution. In 1828 the So. had 35 members; in 1838, 162; in 1848, 280; in 1853, 311; in 1858, 268; and in 1868, 285 members. In 1867 Mr. Ansell made a valuation, and reported a surplus of £2153 19s. 6d.; by his advice the sickness benefits of existing members, and of certain pensioners, were increased *one-sixth*. In 1870 Mr. Ansell reported a surplus of £1025 or 8d.; and this was after the increased allowances had been made. About the same date Mr. Neison, jun., made a valuation, and employing a 4 p.c. T. (instead of 3 p.c. as used by Mr. Ansell), made the surplus £2897 17s. 2d. The rate actually realized upon the bulk of the funds having been £4 11s. 3d. p.c.

In 1872 the So. had 304 members, and an accumulated fund of £14,790 14s. 7½d., or over £48 p. member. For the 20 years preceding 1872, the whole expenditure of the So. (including claims) had been paid out of the *interest on investments*. It is remarkable that the number of members in 1872 was less than in 1852. No reason is assigned for this. The growth of the accumulated fund has been very steady—at no one period receding. See note at end of Class 3.

6. Particular Trade [or Class] Sos.—"With particular Trade Sos., properly so called, may be classed all those which are confined to the members of one or more special employments, although, not strictly speaking, trades." In this view the *Bank of Eng.*

F. So. is included in this designation. Thus the class must include Sos. of great variety of pattern: some may take the range of the entire kingdom—as the *Locomotive Steam Enginemen and Firemen*—already spoken of under “Affiliated Sos.” (as having many analogies with them), but also especially belonging to the present class. This So. extends its operations over the entire kingdom. Others may be confined to a single country, district, county, town, or place; while some are confined to particular estab. In some of the latter, various trades or callings are brought together—as in some of the Railway Sos.

The Commissioners point out that these Sos. have a special interest for the actuary, “as affording him the means of comparing the sickness and mort. in different occupations; and also, where there are several local Sos. in one trade, in the same occupation and different localities—thus holding forth some hope of a solution of the vexed question of the relative influence of occupation and locality.” Many of these “special” Sos. are limited to occupations of more than ordinary risk, as those for Fishermen, Pilots, Miners, Railway Guards, etc., Travelling Post Office Clerks, and others.

Another incident attending particular Trade Sos. is the danger which they incur of being engulfed in the vortex of trades-unionism. The Commissioners say hereon:

... For although there are cases in which the Trade Union passes into the mere F. So. (as in the instance of the *United So. of Smiths and others in East Lothian*—orig. it would seem a Smiths Trade Union, mentioned by Mr. Culley [pp. 45 and 48]), the cases are far more frequent in which the *Trade F. So. passes into the Trade Union*. Nor is the cause for this far to seek. Men belonging to the same trade have a far stronger bond of union in the maintenance or improvement of their common position, as carrying on that trade, than in their common liability to sickness or death. Even apart from any collective action for maintaining or improving that common position, the one contingency which they have all the strongest common interest in providing against is want of employment.

Sir George Young remarks hereon (p. 19):

The system of the Social Club, where it has been endeavoured to make it subserve both ends, has invariably broken down; in fact a secure provision for benefits is incompatible with the primary lien of trade necessities on all the funds.

The Commissioners add:

Nor is this all. Where the particular Trade So. does not pass into the Trade Union, its tendency is to pass into an ordinary F. So. in course of time. As indicated in his evidence by Mr. Finlaison: “Sos. of various trades are mixed together which are not widely different in the amount of risk incurred, and in the occupations pursued,” till perhaps a So. formed for a single trade becomes altogether indiscriminate in its membership. It is obvious indeed that the members of a particular trade may often form a quite insufficient basis of operation, so that it becomes essential to the vitality of a So. to include others. . . .

Sir Geo. Young mentions (Rep. p. 3) a recent case of this expansion in the case of the *Order of Sherwood Rangers*, which has sprung from a decaying Cordwainers So. in Bristol.

We may now mention a few of the more prominent Sos. of this class, giving references for the use of those seeking more ample details. The *United Kingdom Railway Officers and Servants Asso., and Railway Prov. So.*, founded 1861, extends its operations to railway officials throughout the kingdom. The *Commercial Travellers F. So. of Scot.* was founded in 1837, and for some years the membership was limited to Commercial Travellers; but more recently its plan has been extended so as to admit “all persons engaged in commercial pursuits, who, at the time of application, may be resident or travelling in Scot.” It is understood now to be mainly composed of warehousemen. Its financial condition was at one time precarious; but it is said now to be rapidly gaining solidity. The *Northumberland and Durham Miners Permanent Relief Fund*, founded 1862. Of this we have already given an account under that date. The *North Staffordshire Coal and Ironstone Workers Permanent Relief So.*, founded 1870, and having, in 1872, 803 members, with funds of £3431, may prob. remain very much of a Local So.; as also the *Lancashire and Cheshire Miners Permanent Relief So.*, founded at Wigan in 1872, and having at the end of 1875 no less than 19,451 members, with £11,479 in funds.

In regard to some of these special Sos., the Commissioners raise an important point (4th Rep. pt. i. p. lxviii), as follows:

266. It is a peculiar feature both of some of the Railway F. Sos., and of many of those in Collieries, that membership is made compulsory by the employer. A provision to this effect is occasionally introduced into the rules (vide our account of *Midland Railway F. So.* under date 1860); and whether this is not directly illegal, under the terms of the Act, which only authorises Sos. to be formed under its provisions for raising funds “by voluntary subs. of the members thereof, with or without donations,” may at least be questioned.

But looked at carefully, the compulsion is at most only conditional—that is, whilst the person remains in a particular employment, he is to conform to the regulations of that employment, one of the conditions of which is that he shall contribute to a Provident Fund, in view of becoming insured against the particular risks of that employment. If he does not like the condition, he will not accept the employment!

This subject of Particular Trade, or Class, Sos., has appeared to us to be one of peculiar interest, and accordingly we have bestowed upon it considerable special investigation. The following results may be read as supplemental to those stated in the Rep. of the Commissioners. They have been drawn mainly from the “Further Appendix” in part ii. of the Rep. of the Chief Registrar of F. Sos. for 1875, but pub. in 1876.

Particular Trade or Class Sos. came to be formed very early in the hist. of F. Sos. In fact, as Gilds were very frequently associated, either with special religious communities, or with particular industries: so have F. Sos. inherited the like tendencies—and, we suspect, in a much greater degree than has been usually understood. We propose to offer a few examples; but have to premise that, as the Returns from which we draw our examples are admitted to be incomplete, so the examples themselves may partake of this infirmity. The incompleteness will not indeed destroy the force of the examples, as such; but it renders it almost impossible to estimate the exact relation which they bear to the whole of the F. Sos. in existence in the U.K. As to the *unregistered* Sos. of this class, which are said to be numerous—such as [Coal] “Pit Sos.,” etc.—we have no means of reaching these.

Musical F. Sos.—Taking as our first example the F. Sos. associated with the *Musical Profession*, the following 10 are all we find to have been regis.; yet there may in fact have been several more—perhaps some among the Affiliated Orders; but if so, they have escaped our notice. The sickness and mort. experience of the members of this particular profession—exposed frequently to late hours and vitiated atmosphere—would be especially interesting from an actuarial point of view. In the list are one or two Sos. belonging rather to the trade than the professional branch. The Sos. on the whole appear to have been successful.

Friendly Sos. associated with the Musical Profession, or with Trades arising out of the same:

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1822	British and Foreign Musicians So. (Lond.).....	1875	157	£2866
1840	Choral Fund F. So. (Lond.).....	1869	dissolved	
1842	Birmingham Musical So.	1875	83	1383
1849	Apollo Glee and Friendly So. (Birmingham)	“	116	1444
1862	Handel F. (Rowley Regis, Stafford)	“	35	114
“	Music Sellers & Concert Assist. Prov. Inst. (Lond.)	“	113	1165
1863	Music Printers Philanthropic So.	“	70	93
1864	Liverpool and Provincial So. of Musicians	“	56	550
1872	Birmingham Orchestral Asso. F. So.	“	32	101
1875	Milnrow Amateur Brass Band F. So. (Lanc.)	—	—	—

Railway F. Sos.—The next example of Sos. of this class which we propose to offer is of F. Sos. and Provident Funds associated with *Railways*. Railway enterprise is one of modern growth—in point of time limited to the present generation. But its ramifications are very wide, and extend far beyond the range we here propose to take, viz. into ironworks where the “rails” are made; into carriage-works, where the rolling-stock is built; and into the railway clearing-houses, where the relative proportions of traffic receipts are determined. But we here confine ourselves to the various associations of employes in the direct service of the Railway Cos.—and in many, perhaps most, of which membership is *compulsory*, as already stated. In several of the Cos. there is not only the “regulation” So., but there are Provident Funds, or Widows Funds, etc., in addition. The sickness and mort. experience of several of these Sos.; as for instance—the *Locomotive Steam Enginemen and Firemen* So., founded 1839, would be regarded as of great interest.

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1838	Gt. W., Bristol & Exeter & Metrop. Ry. Prov. So.	1875	6019	£13,109
1839	*Locomotive Steam Enginemen and Firemen So.	“	—	—
1842	Engine-Drivers Retreat Lodge (Derby)	“	155	509
“	Lond. Brighton & S. Coast Ry. Prov. So. (Brighton)	“	3422	6,254
1844	Gt. Western Railway Locomotive and Carriage Depart. Sick Fund So. (Swindon)	“	3796	2,733
“	Loco. S. Enginemen and Firemen F. So. (Derby)	“	321	2,756
1846	South Devon Ry. Prov. So. (Newton Abbot)	“	—	—
1849	Railway Guards Universal F. So.	“	1351	17,284
1850	Irish Railway (King's Bridge, Dublin).....	“	1026	479
1851	Gt. Eastern Railway Prov. So.	“	3248	9,000
1852	Loco. Steam Enginemen and Firemen (Dublin).....	“	62	747
1854	Enginemen and Firemen F. So. (Shrewsbury)	“	66	643
“	Lond. & S. Western Ry. F. So. (Wandsworth Rd.)	“	3931	17,469

* Of this So., which is one of the Affiliated Orders really, we have given a detailed account under date 1839.

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Fund in Hand
1855	Local Steam Engine and Firemen F. (Norwich)	1854	122	1,060
1857	Caledonian Railway Servants (Glasgow)	"	597	896
"	Gt.N. Ry.Loco.Sick (Gt.N. Ry. Works, Doncaster)	"	4400	669
"	North Eastern Ry. Prov. So. (Gateshead)	"	1157	3,051
1859	North London Railway Prov. So.	"	486	2,131
1860	† Midland Railway F. So. (Derby) [1860]	"	12,856	11,873
1861	Dublin and Drogheda Railway Prov. (Dublin)	"	—	—
"	Loco. S. Engine and Firemen So. (Wolverton)	"	196	1,674
"	Lond. & S. W. Ry. Wid. & Orph. Ben. So. (Lond.)	"	196	2,760
"	United Kingdom Ry. Officers and Servants Asso.	"	883	1,914
1862	Belfast and Northern Counties Ry. Prov. (Belfast)	"	756	215
1863	Dublin, Wicklow, and Wexford Ry. Prov. (Dublin)	"	704	1,374
"	Leeds North Eastern Prov.	"	35	97
"	Railway Provident So. (Lond.)	"	884	324
"	Waterford and Limerick Railway	"	653	1,787
1864	Glasgow and South Western Ry. Locomotive	"	441	—
"	Gt. W. Ry. S. Wales Sick & Fu. (Newport, Mon.)	"	80	124
1865	Caledonian Ry. Engine Drivers & Firem. Life Ins.	"	—	—
1866	Hull Railway Benefit (Kingston-upon-Hull)	"	49	371
1867	Camden Station Prov. So.	"	382	254
"	South Devon, Cornwall and West Cornwall Ry.	"	—	—
"	Incapacitated & Superann. Fund (Plymouth)	"	—	—
1868	Caledonian Ry. Engine Drivers and Firemen Sick and Superannuation (Glasgow)	"	—	—
"	Locomotive Provident (North Bow, E.)	"	18	121
"	North of England Ry. Servants Prov. (Carlisle)	"	63	107
"	Manchester and Milford Ry. F. (Aberystwith)	"	81	82
1869	Ry. Signalmen and Switchmen United Aid and Sick So. (Clapham, Lond.)	"	66	370
1871	Midland Gt. Western Ry. Benefit (Dublin)	"	608	467
"	N. British Ry. Engine Drivers and Firemen Life Assu. (Glasgow)	"	—	—
1872	Mid & E. Lothian Engine Keepers Asso. (Dalkeith)	"	40	47
"	North Eastern Ry. Prov. (Tyne Dock, S. Shields)	"	84	91
1874	E. Central Prov. So. of Ry. Servants (Grimsby)	"	33	30
"	South Devon Ry. Working Men's Club and Inst.	"	—	—

† The F. So. Commissioners state this So. to have been founded in 1869.

It is possible that several of the preceding are simply branches of the *Locomotive Steam Enginemen and Firemen's So.* of 1839; but as they are not so stated, we have no precise means of judging.

The F. Sos. Commissioners in their 4th Rep. (p. lxxi) offer the following obs. on these Railway Sos.:

288. . . . It can but be assumed from the employment in which the members are engaged that they are better educated than the ordinary run of members of F. Sos.; and in so far as the directors and the higher class of officials are interested in the man. of the R. Sos., it cannot be doubted that there is a benevolent intention, and a high order of general intelligence. Nevertheless there is good reason to believe that the financial condition of all these Sos. is unsound: *in other words, that the rules make promise of greater benefits than the contributions can by possibility make good.*

289. It must be inferred that to some extent this condition of things is due to the same causes as produce it in so large a proportion of all Benefit Sos.: such as insufficient appreciation of the risks involved, and inaccuracy of rules; too little care in the making, and the alteration of them; laxity of management; absence of periodical valuation, and the like; but it is at least remarkable that these same evils or oversights should obtain so decidedly where better things may be well looked for; and that an illustration of the widespread ignorance on these subjects should be found where it might have been so little expected.

They add:

290. While not exempted from these more general causes of bad result, there are other features peculiarly prominent in these Railway Sos. which deserve especial notice.

291. They are generally subsidized by the Cos., and thus there is generated a false confidence that benefits to which the rates of contribution are not in themselves commensurate, are secured to the members; and that the Co. will at all events make good what its managers have more or less directly joined in promising. Any reliance of this kind tends at best to laxity of man. by the members; the benevolence of its intention, too, probably prevents any proper consideration of the adequacy of the subsidy; and although fully relied on as a certain recurring payment, the grant of the subsidy prospectively may be of no legal obligation. It is also clear when a subsidy is fixed in amount and originally calculated as equal to supplement the contributions of a So., that a subsequent growth in the numbers disturbs the whole calculation, and the fixed subsidy becomes inadequate for the purpose it was intended to fulfil; all parties discover at length that they have been misled, and dissatisfaction or worse results too prob. follow.

The question of compulsory membership, and some other points which we have already dealt with, are also considered by the Commissioners.

We observe that several of the larger Railway Cos. are taking powers under their Special Acts for regulating the Friendly or Provident Funds attached to them; and as nearly all the Cos. subsidize their Sos., we do not know that anything can be offered by way of objection to this course; but we assume its direct effect will be to take such Sos. from under the control of the general law relating to F. Sos.; and that therefore we shall gradually lose sight of them in the ann. and other returns made to Parl.

Religious and School F. Sos.—These constitute a large class of F. Sos.—it is impossible to say *how large*: for many of the Sos. are almost impossible of identity in this connexion. Hence it may have happened that some F. Sos. which are merely held at school-rooms or vestries, as a matter of convenience, and to escape the evils of the public-house, have been classed by us in the following list; and the converse error may also have occurred—although this is not so likely of occurrence. It will be observed that such Sos. prevail much more in some counties than in others. The Midland Counties stand most prominent. The Eastern and Southern Counties least so. In some of these there is hardly a single instance—Suffolk, however, being an exception. Again, some of the religious bodies appear to make it a practice to estab. F. Sos. in connexion with their churches and schools—the *Wesleyan Methodists* affording the most prominent instance. The mort. and sickness experience of Sos. of this class, as distinguished from F. Sos. generally, should be of interest. See remarks under Class 4.

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
				£
1756	F. Un. Ben., Wesleyan Chap., Lincoln's Inn (Lond.)	1875	13	335
1798	Birmingham Unitarian Brotherly Benefit.....	"	489	9641
1802	Stone Chapel Club and Mut. Benefit (Bulwell, Notts)	"	115	345
1812	Pratt St. F. (Schools, West Bromwich)	"	208	1798
1813	St. George's Sick & Fu. So. Nat. Schs. (Hulme, Manc.)	"	55	415
"	Wesleyan Union Sick (Sheffield)	"	210	6157
1815	Ebenezer Union Benefit (Rotherhithe)	"	84	858
1817	Wellington (Somerset) Church Schools	"	180	541
1819	Baptist F. So. (Barrowden, Rutland)	"	177	1173
"	F. So., New Methodist Chapel (Chilwell, Notts)	"	62	761
"	Old Meeting F. (Birmingham)	"	461	7622
1820	Atherton Church Sunday School Sick So. (Lanc.)	"	280	444
1822	Christian F. So. (Derby)	"	83	854
"	St. James F. So. (Nottingham).....	"	47	338
"	Wesleyan Sunday School Male Philant. (Stockport)	"	144	1348
1823	F. So. Congregational Church (Sleaford)	"	203	1282
1824	Norwich Octagon Chapel Brotherly	"	128	2063
1825	Ind. Method. Sun. Sch. Sick and Burial (Oldham)	"	559	653
"	Stockport Tabernacle Chapel Male Christian.....	"	112	870
1826	Sunday School Sick So. (Preston)	"	229	717
1827	Manchester Collegiate Church S. Sch. Sick and Fu.	"	123	896
"	Stockport National School Sick So.	"	153	1297
"	Wesleyan F. So. (Heanor, Derby)	"	61	453
1828	Church Sunday School Sick So. (Tyldesly, Lanc.)	"	217	158
1829	Marpool Chapel Benefit (Derby)	"	161	1133
"	Orchard Hill Baptist Sunday School Sick and Burial (Stacksteads, Manchester)	"	565	1650
"	Prov. Sick So. Sion Chapel (Longton, Stafford)	"	61	1625
1831	Belfield Church of England Sick (Sheffield)	"	49	615
"	Benefit Religious So. (Watton, Norfolk).....	"	74	363
"	Holmes Chapel Church Sun. Sch. (Holmes, Yorks)	"	55	207
"	Uni. Brethrens F. So. (Earl's Shilton Ind. Chapel)	"	222	1375
1832	Gt. Harwood Church Sunday School Sick So.	"	386	1555
"	Stapleford Prov. (Method. Sch., Stapleford, Notts)	"	63	454
1833	F. So. (Wesleyan School-room, Oldbury)	"	179	892
"	Wakefield Wesleyan Methodist F.	"	27	574
"	Unitarian So. of Tradesmen (Dunster)	"	75	900
"	Wesleyan Methodist Benevolent (Willenhall)	"	182	1330
1834	Church of England Club (Dudley)	"	74	220
"	Gt. Torrington Protestant Dissenters	"	—	—
"	Provident So. (School-room, Gomersal)	"	54	759
"	Warrington Parish Ch. Sun. & Male Sch. Sick & Bur.	"	142	643
"	Wesleyan F. Sick and Burial (Rawtenstall)	"	278	1347
1835	Christ Church Prov. (Birmingham)	"	713	5933
"	Farnsfield Wesleyan F. (Notts)	"	138	1744
"	Princes Street Chapel Prov. (Norwich)	"	23	275

Year of Etab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Fund in Hand.
1836	Barlestone Churchwoman's F.	1875	65	182
"	Padiham Church School Sick (Lanc.)	"	55	426
"	Sandiacre Wesleyan Sick (Derby)	"	122	1741
"	Whalley Schools Sick So. (Lanc.)	"	57	686
1837	Chapel Club (Pensford, Somerset)	"	70	331
"	Old Meeting Benevolent Club (West Bromwich)	"	156	1547
"	Prov. So. of Independent Churches of the West Riding of Yorks (Bradford)	"	73	10,222
"	Stand Church Sunday School Sick So. (Lanc.)	"	216	827
1838	Amicable Sick and Burial (Methodist Free Church Sunday School, Blackley, Lanc.)	"	1101	2303
"	Brandon Wesleyan F. Benefit (Norfolk)	"	118	508
"	Henley Congregational Benefit (Oxon)	"	182	3247
"	Primitive Methodist F. (Fisherton, Salisbury)	"	187	397
"	St. Clement's Ch. Sun. Sch. Sick So. (Spotland, Lanc.)	"	233	740
"	Victoria F. (Baptist Chapel, Hose)	"	100	385
"	Wingates Legal Burial, Independent Methodist Chapel (Westhoughton, Lanc.)	"	342	271
1839	Fence Church Sunday School Sick (Lanc.)	"	58	364
"	Male F. (Baptist Chapel, Thurlaston)	"	36	331
"	Methodist Centenary F. So. (Lincoln)	"	257	714
"	The Christian Agricultural Limited F. So. (Christow, Devon)	"	80	600
"	Unitarian Sick and Burial (Waterfoot, Lanc.)	"	235	1846
"	Wesleyan Methodist Sunday School Sick and Burial So. (Haslingden)	"	524	1965
"	Wesleyan Methodist Sick So. (Pontefract)	"	144	1251
1840	Epping Green Meeting (Essex)	"	97	852
"	Huddersfield Wesleyan Methodist F.	"	67	828
"	St. James F. (School, Handsworth)	"	218	1636
"	Sick Union So. (Trinity Baptist Sunday School, Haslingden, Lanc.)	"	457	1020
"	Leek Congregational Sick and Burial	"	68	468
1841	Christian So. (Whepstead, Suffolk)	"	76	168
1842	Disley Church Sunday School Sick So. (Cheshire)	"	80	465
"	Kidderminster Church of England Mut. Aid	"	197	1870
"	The Knowsley Sunday School Sick So. (Lanc.)	"	309	1837
"	Trinity Church F. (West Bromwich)	"	114	1157
"	Welsh Christian F. So. (Liverpool)	"	—	—
1843	Chapel Allerton & Meanwood Ch. Sun. Sch. (Yorks)	"	118	964
"	Kirkburton Church Sunday School (Yorks)	"	61	382
"	Protestant Trinitarian Benefit (Cheltenham)	"	468	1275
"	Sick and Funeral So. connected with the St. Paul's Sunday School (Manchester)	"	—	—
"	Surrey Tabernacle Benefit (Walworth)	"	1030	7198
1844	Bloxwich Church of England	"	237	1986
"	Bridge St. and Sunday School F. (Walsall)	"	100	1567
"	Church of England F. (Ashby-de-la-Zouch)	"	91	1106
"	Littleborough Trinity Church Sch. Adult Sick and Funeral (Lanc.)	"	416	1212
1845	F. So. (St. Nicholas Chapel, Ipswich)	"	95	585
"	Norton Church (Suffolk)	"	181	613
"	Wellingboro' Ch. of Eng. Female (Northampton)	"	285	1039
"	Wesleyan Benefit (Kidderminster)	"	36	100
1846	Habergham Sunday School So. (Lanc.)	"	15	84
"	Heald Wesleyan Sch. Sick & F. So. (Bacup, Lanc.)	"	163	1174
"	Hurst St. Prov. and F. (Vestry, Birmingham)	"	169	1203
"	Irlam Wesleyan Sunday School Sick & Burial (Eccles)	"	159	205
"	Leek Church Female Sick and Burial	"	59	351
"	New Church Prov. (Birmingham)	"	122	1295
"	Read National School Sick (Lanc.)	"	138	804
"	Higher Hurst Sick and Burial (Methodist New Connexion School, Ashton-under-Lyne)	"	208	809
"	Prince's End Prov. (Baptist School-room)	"	74	876
"	Sowerby Bridge Wesleyan Sick (Yorks)	"	106	617
"	Tunstall Wesleyan Mut. Prov. (Staffordshire)	"	145	1510

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1846	Wesley Chapel Sick Club (Nottingham)	1875	96	£ 480
1848	Lumb Church School Sick and Burial (Lanc.)	"	147	509
"	St. Olave, St. John and Bermondsey Church of England Benefit (Lond.)	"	316	3194
"	Tonge-cum-Alkrington Dist. & School Sick So. (Lanc.)	"	788	1899
1850	Christian Mut. Benefit (S. Ockenden, Essex)	"	210	1623
"	Tipton Church of England Benefit	"	47	407
"	United Methodist Free Ch. Sick & Bur. (Rawtenstall)	"	130	440
1851	Hallfold Chapel Sick and Burial (Lanc.)	"	302	2256
"	Primitive Methodist So. (Rotherham)	"	223	518
1852	The Baptist F. (Wymeswold)	"	195	802
"	Brierley School Adult Sick (Yorks)	"	191	1093
"	Church of England F. (Lower Gornal, Stafford)	"	186	299
"	Female F. Church So. (Oadby)	"	77	118
"	F. So. (Prim. Meth. Chapel Catshill, nr. Bromsgrove)	"	22	127
"	Langho Sunday School Sick and Burial (Lanc.)	"	109	332
"	Primitive Methodist F. (West Bromwich)	"	52	190
1853	Morning Star F. (Prim. Meth. School, Wednesfield)	"	61	50
1854	Catholic Benevolent Sick (Coventry)	"	30	232
1855	Collycroft School Male (Bedworth, Warwick)	"	121	217
"	Congregational Benefit (Stone)	"	108	101
"	Louth and Neighbourhood Primitive Methodist Funeral Brief F. So. [Fire Briefs]	"	398	9
1856	Churchfield Mut. Aid (Schools, West Bromwich)	"	27	461
"	The Kilmersdon Church Club (Somerset)	"	52	182
"	Wesleyan Sunday School Sick (Halesworth)	"	203	551
1857	Burton-on-Trent Christian Union F.	"	79	266
"	Congregational Sick Benefit (Wickham Market)	"	129	623
"	Little Lever Wesleyan F. So. (Lanc.)	"	131	498
"	New Jerusalem Church and Sunday School Sick and Burial So. (Heywood)	"	—	—
"	Padiham Unitarian Sick and Burial (Lanc.)	"	114	661
1858	Church of the Saviour Prov. So. (Birmingham)	"	717	935
"	Congregational Sunday School (Failsworth, Lanc.)	"	73	95
1859	Methodist Free Church Sick and Burial (Wigan)	"	346	414
"	U. Metho. Free Ch. Sick & Bur. (Middletown, Lanc.)	"	97	296
1860	Heywood St. Luke's Sunday Schools (Bury, Lanc.)	"	139	645
"	Primitive Methodist Benefit (Thetford)	"	40	—
1861	Stand Unitarian S. Sch. & Chapel Sick & Bur. (Lanc.)	"	124	308
"	United Methodist Free Church (Darlaston, Stafford)	"	70	237
1862	Ebenezer Sick and Burial (Newcastle-under-Lyne)	"	28	108
"	Holy Cross Catholic Young Men's Sick and Burial Tontine (Liverpool)	"	44	126
"	Quinton Church Benefit (Worcester)	"	103	495
"	Religious Benefit (Faversham, Kent)	"	219	551
"	Samaritan F. (Messrs. Marshall's School, Leeds)	"	256	1510
"	Wesleyan Meth. Sun. Sch. Female Phil. (Stockport)	"	—	—
1863	Christian Mut. Aid F. (Exning, Suffolk)	"	23	67
"	Haworth, Oxenthorpe, and Stanbury Church Sunday School Sick (Yorks)	"	86	436
"	Helmshore Wesleyan Meth. S. Sch. Sick & Bur. So.	"	102	341
"	New Connexion Sick and Bur. (Hunslet Carr, Leeds)	"	186	857
"	Primitive Methodist F. (Halesowen, Worcester)	"	69	238
"	Refuge F. Prim. Meth. Chapel (Mollington, Banbury)	"	27	119
"	St. Anthony's Catholic Young Men's Sick and Burial So. (Liverpool)	"	73	151
"	United Methodist Free Church (Huddersfield)	"	38	120
1864	Christian F. (School, Over Darwen, Lanc.)	"	154	345
"	Particular Baptist Sick So. (Blackburn)	"	66	171
"	St. James's Female F. (Wednesbury, Stafford)	"	284	303
"	St. James's Parish Church (Brompton, Tonge)	"	160	386
1865	General Baptist F. (Sutton-in-Ashfield)	"	38	75
"	Northampton Unitarian Christian Church	"	67	—
1866	Chasetown Prim. Methodist Renewal (Staffordshire)	"	133	378
1867	Congregational Mut. (Pudsey, Yorks)	"	87	242
"	Hunslet United Sunday Schools (near Leeds)	"	42	37

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1867	United Methodist Free Church (Liverpool)	"	—	£ —
1868	Baptist Sunday School Sick and F. (Accrington)	"	831	4313
"	Todmorden Parish Church Prov. F. (Lanc.)	"	165	328
1869	Church Sick So. (Westhoughton, Lanc.)	"	399	267
"	Primitive Methodist Benefit (Wootton Bassett)	"	126	1417
"	Woodgate F. (Chapel Woodgate, near Birmingham)	"	47	159
1870	Wesleyan Sick and Burial (Newchurch, Lanc.)	"	115	409
1871	Bartley Green Church Prov. (School-room)	"	33	54
"	Blackett Street Presbyterian Church Prov. (Newcastle-on-Tyne)	"	105	101
"	Mayfield Chapel Benefit	"	31	52
1872	Masbury National Sunday Sch. Sick & Burial (Lanc.)	"	128	957
"	National School F. (Haywards Heath)	"	30	120
"	Pensnett Church Mission, Sick and Death	"	37	74
"	Wesleyan Sun. Sch. Sick and Bu. (Padiham, Lanc.)	"	57	185
1873	Cleckheaton Wesleyan Meth. Sun. Sch. Sick (Yorks)	"	24	14
"	Fleet and Long Sutton Christian F.	"	175	351
"	Particular Baptist Sunday School and Friends Sick and Burial (Rochdale)	"	98	374
"	St. Dominic's So. (Priory School-room, Southampton-road, London)	"	92	33
1874	Helsby, Alvanley, and Manley Sunday School Sick and Burial (Alvanley, Cheshire)	"	—	—

Temperance or Teetotal F. Sos.—Many of the Sos. last enumerated are either limited to or composed of persons of the temperance class—or who are professed total abstainers from all alcoholic beverages. But in add. there is a large number of Sos. composed exclusively of pledged total abstainers, and bearing the distinctive titles of Temperance Sos. We had commenced to compile a list of these; but soon found that it would be but a very incomplete representation of the facts. There are whole Orders with whom teetotalism is an essential feature—as the *Rechabites*, the *Sons of Temperance*, the *Good Templars*, etc. In some Tables which we shall give at the close of this art., relating to the F. Sos. existing in the various counties of E. and W., will be found enumerated many Sos. indicating that they are limited to "Temperance" members. See Class 4.

Particular Trade and Class Sos. generally.—The preceding being offered only as examples, there yet remains the great bulk of the Sos. coming under this denomination to be spoken of. As we have already intimated, these are much more numerous than could have been supposed prior to careful investigation. Having made such investigation, it became a question of how the results could be best presented. They might be arranged alphabetically as to trades, etc.; they might be arranged geographically into counties or districts; or they might be placed in chronological order—in view of exhibiting the gradual development of the class; but with the geographical limitations of the three divisions of the kingdom preserved, in view of illustrating national differences in practice, etc. This latter plan we have adopted.

It has to be remembered that in add. to the following, many of the Affiliated Orders have Lodges composed almost entirely of members of the same trade or calling; but as to these we could not always discriminate, and so they are excluded.

Table of the F. Sos. for Particular Trades, or consisting of particular classes of persons in the three divisions of the U.K.

England:

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1712	Goldsmiths F. So. (Lond.)	1875	63	£1279
1731	Old Dredgers [oysters] (Faversham)	"	80	1037
1760	Clothiers Loyal and F. So. (Armley, near Leeds)	"	354	2188
1764	So. of Protestant Refugees (Bethnal Green)	"	27	1155
1766	F. and Benevolent So. of Pilots of the Port of L'pool.	"	—	—
1767	Masons Sick So. (Sheffield)	"	85	1010
1792	Mariners Union So. (Clovelly, Devon)	"	84	777
1793	So. of Pilots (South Shields)	"	—	—
1794	Friendly or Miners So. (Tibshelf, Derby)	"	—	—
"	So. of Weavers and other Artificers (Turton, Lanc.)	"	—	—
1795	F. So. of Dredgers (Queenborough, Kent)	"	—	—

Year of Etab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1796	Shipwrights Asso. (S. Shields)	"	—	£ —
1798	Brotherly So. of Woolstaplers (Southwark)	"	91	2102
1801	Spanish Leather Dressers (Bermondsey)	"	169	2059
1805	So. of Weavers & other Arti. (Tyldesley, Lanc.)	"	—	—
1809	Royal Jubilee F. So. [of Cutlers] (Sheffield)	"	174	8164
1810	F. So. of Miners (Tavistock)	"	—	—
"	Kent F. So. of Bricklayers (Rochester)	"	—	—
1811	Silversmiths Sick and Funeral So. (Sheffield)	"	127	1599
"	So. of Non-Commissioned Officers, Trumpeters, and Privates of H.M. 7th Dragoon Guards (Manc.)	"	—	—
1812	College Servants Benefit So. (Oxford)	"	142	1287
1816	So. for the Benefit of Widows and Orphans of the Hospital & Regt. Staff of H.M. Army (Lond.)	"	160	79719
1820	Loyal United Lodge Sons of Israel (Houndsditch)	"	66	155
1822	Artists F. So. (Hanley Potteries)	"	109	3271
"	Seamens So. (Lynn)	"	218	658
1824	Clothiers Benevolent So. (Leeds)	"	87	490
"	Portsmouth Dockyard Union Ins. Benefit So.	"	238	2007
1825	Colliers F. So. (Llanely, S. Wales)	"	109	1178
1826	Orig. Uni. F. So. of Cooks & Confectioners (Lond.)	"	279	1402
1827	Lovers of Justice & Peace (Goodman's Flds., Lond.)	"	85	436
"	Phoenix Philanthropic So. of Painters and Glaziers	"	215	997
1830	Breage Loyal Miners (Cornwall)	"	—	—
"	Brothers in Friendship Watchmakers Prov. So. (Lond.)	"	96	639
"	Greenwich Waterman's Prov. Inst.	"	108	4469
1831	Boston Shipwreck So. (Lincolnshire)	"	278	1617
1832	Liverpool Shipwrights Benefit	"	—	—
"	Plymouth, Stonehouse & Devonport Tailors Prov.	"	63	278
"	Post Office Employes F. Burial So. (Lond.)	"	1392	908
1834	Clothiers Cutters Benefit So. (Lond.)	"	189	1620
1835	Blacksmiths F. So. (Winlaton, Durham)	"	143	1804
1836	Alfreton Iron Works Lodge (Derby)	"	81	218
"	City Amicable Burial So. of Oper. Plasterers (Lond.)	"	55	260
"	Hope F. So. of Painters and Glaziers (Lond.)	"	155	711
"	Whitehaven Shipwrights F. So.	"	63	123
"	Woolcombers So. (Keighley, Yorks)	"	40	645
1837	Leeds Slaters F.	"	40	426
1838	Operative Bricklayers F. (Manchester)	"	—	—
"	Cardiff Shipwrights Prov. Benefit F. So. (Cardiff)	"	402	1498
"	Exeter Central Prov. So. of Master Bakers	"	—	—
"	Operative Painters Tontine So. (Liverpool)	"	—	—
1839	Artists Amicable Fund (Lond.)	"	123	2862
"	Hotel and Tavern Keepers Prov. Inst. (Lond.)	"	80	5200
"	The Job & Postmasters, Coach Propr. Horse Dealers, and Livery Stable Keepers Prov. Fund (Lond.)	"	179	394
"	Journeymen Hair Dressers Trade So. (Lond.)	"	50	—
"	London Dock F. Inst.	"	559	40654
"	Newsvendors Benevolent and Prov. Inst. (Lond.)	"	288	6274
"	Phil. So. of Journeymen Millwrts. of Lanc. (L'pool)	"	—	—
"	St. Just Miners New F. So. (Cornwall)	"	—	—
1840	Brewers and Distillers Clerks Annuity Fund for their Widows and Orphans (Lond.)	"	45	9087
"	Drillman's and Poor Man's F. (Peasenhall, Suffolk)	"	78	505
"	East and West India Dock Prov. So. (Lond.)	"	1414	6785
"	Stationers and Papermakers Prov. So. (Lond.)	"	184	28,444
1841	College Servants Prov. Inst. (Oxford)	"	165	3358
"	Non-Commissioned Officers F. (Plymouth)	"	—	—
"	Working Man's Teetotal Brotherly Gift (Lond.)	"	63	231
1842	Caradon Miners and Mechanics (Cornwall)	"	232	1243
"	London Journeymen Confectioners Asso. (Lond.)	"	40	251
"	Philan. So. of Journeymen Millwrights of Liverpool	"	—	—
"	Vellum Binders & Machine Rulers Pension So. (Lon.)	"	215	—
1844	Devonport Dockyard Sailmakers	"	—	—
"	F. So. of Caulkers, Devonport Dockyard	"	—	—
"	Liverpool Shipwrights F. Asso.	"	1772	3347
"	London Union of Hammermen ("Moonrakers Tavern," Southwark)	"	95	435

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Fund in Hand.
1844	Spalding Shipwreck So.	"	68	£ 78
1845	Brewer's, Chester's, & Galley Quays Prov. So. (Lond.)	1875	52	691
"	Cabinet Makers Benefit So. (Lond.)	"	42	454
"	Devonport Dockyard Sick and Hurt	"	179	—
"	Stationers Mut. Benefit So. (Lond.)	"	430	9500
"	Watchmakers Prov. So. (location not stated)	"	184	2352
1846	General Domestic Servants Benevolent Inst. (Lond.)	"	—	—
"	Oil & Colourmen, Druggists, & Drysalers F. So. (Lon.)	"	131	860
"	Operative Bricklayers So. (Newcastle-on-Tyne)	"	62	267
"	Seamen's New So. (Lynn)	"	83	688
1847	Metrop. Com. Trav. & Warehousemen's Asso. (Lon.)	"	574	8242
"	Tradesmen's and Operatives Ind. Benefit So. (Lond.)	"	49	637
"	Waterman's Amicable So. (Warrington)	"	151	679
1848	Customs Water Guard So. (Liverpool)	"	—	—
"	Humber Pilots W. & O. Fund (Kingston-upon-Hull)	"	20	416
"	Law Clerks F. (Manchester)	"	142	3048
"	Woodfield and White Lee Collieries (Durham)	"	82	171
1849	Liverpool Police Sick and Funeral	"	1266	167
"	Merthyr New Connexion Miners Benev. (Dudley)	"	162	672
1850	London Copperplate Printers Benev. and Pension Fund (London)	"	116	609
1851	Liverpool Dock Gatemens Mut. Benefit	"	502	235
"	London Post Office Sick Benefit So.	"	120	168
1853	Coventry Watchmakers Widows and Orphan Aid	"	55	1620
1854	Exeter Licensed Victuallers Benefit So.	"	—	—
"	Weymouth & South Coast of Eng. Mariners F. So.	"	—	—
1855	L'pool Oper. Ship Painters F. Acci. & BurialTontine	"	21	2
"	Liverpool Riggers Asso.	"	—	—
1856	Bleachers New Benev. Sick and Burial (Manchester)	"	46	5
"	Carpet Weavers F. (Wilton, Wilts)	"	27	17
"	Chester Tailors Sick and Burial So.	"	—	—
"	Club des Indépendents (Newman Street, Lond.)	"	93	121
"	Dartmoor Prison Officers F. So.	"	—	—
"	Engineers New F. (Longton, Stafford)	"	19	73
"	Miners Benevolent (Dudley)	"	62	151
"	London Customs Watermen's Burial So.	"	165	299
"	Provident Slate Club (Bermondsey)	"	80	85
"	Registrars and Gen. Assu. So. (London)	"	141	958
"	Sherwood F. So. (Price's Candle Co., Battersea)	"	200	1727
"	Ship Sawyers Trade and Burial (Liverpool)	"	—	—
1857	F. So. of Operative Plasterers (Liverpool)	"	—	—
"	Northamptonshire Constabulary (Northampton)	"	95	86
"	St. Giles and St. George, Bloomsbury, Working Men's Benefit Club (London)	"	332	738
"	United Order of Smiths (Liverpool)	"	—	—
1858	Deal Pilots Mut. Benefit	"	32	597
"	File Grinders Benefit and F. So. (Sheffield)	"	192	788
"	Fisherman's Sick and Burial (Ildeby, Norfolk)	"	60	255
"	Liverpool Plumbers F. So.	"	—	—
"	Old Etherley Colliery F. So. (Durham)	"	551	2173
"	Philanthropic Coopers (Bristol)	"	—	—
1859	Convict Prison Officers Benefit (Knaphill, Surrey)	"	96	175
"	Devon Constabulary Benefit	"	333	412
"	Lithographic Printers Prov. Fund (Lond.)	"	27	70
"	Tailors Benefit So. (Derby)	"	—	—
1860	Friendly So. of Carpenters and Joiners (Lond.)	"	20	281
"	Royal Veteran Pensioners (Plymouth)	"	—	—
"	Shotter Mills Prov. (Lion Green, Surrey)	"	45	186
1861	Commercial Dock F. (Rotherhithe)	"	25	13
"	London Gas Works Prov. (Vauxhall)	"	223	—
"	Tailors Sick and Prov. F. (Lincoln)	"	20	108
"	Warrington Factory Operatives F.	"	—	—
1862	Astley Deep Pit Accident (Dunkinfield, Cheshire)	"	—	—
"	Clergy Institute for Mutual Aid (Lond.)	"	25	178
"	Liverpool Coopers Benefit	"	97	12
"	Miners Protection So. (West Bromwich)	"	30	23
"	Saddlers and Harness Makers Pens. F. Asso. (Lond.)	"	5	4011

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1862	Shireoaks Colliery Sick and Accident (Notts)	1875	883	£ 223
"	United Tanners F. (Bermondsey)	"	71	300
1863	Colliery Sick and Burial (Leigh, Lanc.)	"	424	102
"	Coppersmiths and Braziers (Liverpool)	"	—	—
"	Dressing Case Makers & Fancy Trades F. So. (Lond.)	"	78	1738
"	Liverpool Independent Farriers So.	"	—	—
"	Liverpool Shipwrights Second Prov.	"	—	—
"	Metropolitan Promoters of Charity (Lond.)	"	56	21
"	Montreal Ocean Steamship Co. Mut. Ben. So. (L'pool)	"	1638	7850
"	Police Provident F. So. (Lewes)	"	111	2992
"	Working Men's Christn. Asso. & Prov. Ben. So. (Lon.)	"	442	175
1864	Blast Furnace and Laborers Acci. & Bu. (Darlington)	"	—	—
"	Cricketers Fund F. So. (Lond.)	"	46	2851
"	Darlington Labourers Benev. Acci. and Burial So.	"	—	—
"	F. So. of Mut. Progress of Italian Operatives in Lond.	"	70	119
"	Miners Benefit (Kingswinford, Stafford)	"	70	169
"	Miners Refuge Sick and Prov. (Leeds)	"	70	262
"	Ramsgate Fishermen and Mariners (Kent)	"	—	—
1865	Benevolent Miners (Dudley)	"	54	69
"	Cornmen's Benefit (Liverpool)	"	—	—
"	Liverpool Operative Saddlers	"	—	—
"	Miners Prov. (Wrockwardine Wood, Salop)	"	58	171
"	Royal Waterman's Burial and Prov. So. (Leigh)	"	—	—
"	W. India & Pacific S'mship Co.'s Mut. Ben. (L'pool)	"	—	—
1866	Barge Builders United F. (Lambeth)	"	19	24
"	Bass and Co.'s Coopers F. (Burton-on-Trent)	"	12	49
"	Brighton Printers Sick Fund	"	22	560
"	Coventry Watchmakers Inst.	"	82	215
"	Engine Works F. So. (Brit. and N. American Royal Mail Steamship Co.'s Works, Liverpool)	"	—	—
"	Independent So. of Labourers (Kensington)	"	32	37
"	Liverpool Seamen's Protective	"	560	235
"	Loyal Salt Lodge (Stapenhill)	"	91	287
"	Musical Instrument Makers Benefit (Manchester)	"	27	105
"	Sailmakers Sick and Burial So. (Lond.)	"	88	156
"	Saltheavers Burial So.	"	—	—
"	Twelfth Lancashire Artillery Volunteer So. (L'pool)	"	—	—
"	United Horticultural Benefit and Prov. So. (Lond.)	"	58	1264
"	United Waiters Prov. So. (London)	"	74	252
1867	Abattoir F. Sick and Burial (Liverpool)	"	—	—
"	Cazeneau Quay Carters (Liverpool)	"	—	—
"	City of Manchester Horseshoe F.	"	—	—
"	City Waiters Prov. Protection So. (London)	"	56	807
"	Collectors Sick Benefit (Liverpool)	"	—	—
"	Kingston-upon-Hull Coal Heavers Sick and Burial	"	77	164
"	Liverpool and Birkenhead Flour Dealers and Bread Bakers Assistants F.	"	—	—
"	Liverpool Whip Sick and Burial Tontine	"	52	90
"	Makers-Up F. Burial (Bradford, Yorks)	"	140	479
"	Morocco Leather Finishers (Bermondsey)	"	81	204
"	National Shipwrights Sick and Burial	"	102	199
"	New Tredegar F. (Tredegar Colliery, Monmouth)	"	120	100
"	North End Ship Scrapers Sick and Burial (Liverpool)	"	—	—
"	Nottingham Licensed Victuallers Prov.	"	317	790
"	Old Volunteer Sick (Charlton, Notts)	"	210	891
"	Professional Gardeners F. Benefit So. (Leeds)	"	138	475
"	Weighers and Freight Clerks Union F. So. (L'pool)	"	—	—
1868	Hand of Help Quarryman's F. (Morley, Leeds)	"	42	103
"	Liverpool Assistant Pawnbrokers	"	49	172
"	Liverpool Waiters Sick and Burial	"	—	—
"	Newcastle-on-Tyne Hebrew New F.	"	30	36
"	Société des Amis Réunis (London Wall)	"	66	101
"	Southwold Seamen's F. (Suffolk)	"	42	314
1869	Birmingham Letter Carriers Prov.	"	56	82
"	Liverpool Riggers and Mariners Equit. Sick & Bur.	"	63	22
"	Miners F. (Skegby, Notts)	"	56	102

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1869	North-west London Farriers United So.	1875	156	£ 258
"	Waterworks Independent Sick and Bur. (Liverpool)	"	123	1
1870	Colliers Friend-in-Need S. (Garndiffaith, Monmth.)	"	38	34
"	Tapton Colliery Mut. Benevolent (Chesterfield)	"	—	—
"	West Yorkshire Fire Brigade F. (Bradford)	"	228	316
1871	Bricklayers Accident and Bur. (West Widnes, Lanc.)	"	—	—
"	Chatham Prison Officers Mut. Benevolent	"	192	6
"	Liverpool and Gt. Western Steam Co.'s Mut. Benefit	"	483	1805
"	Liverpool Typographical Sick and Funeral	"	—	—
"	Miners Wife So. (Rowley Regis, Stafford)	"	280	104
"	Royal Liverpool Hotel Porters Sick and Burial	"	44	162
"	Société Culinaire Française (London)	"	72	73
"	South London Brewery Burial	"	71	94
1872	Abercorn Colliers and Workmen's Sick & Fu. (Mons)	"	800	250
"	Cabman's Sick and Burial (Nottingham)	"	31	62
"	F. So. for Relief of Scarborough Fishermen (Yorks)	"	36	507
"	Ind. Sick and Ben. So. of Co-operat. Bakers (L'pool)	"	—	—
"	Lanc. & Cheshire Miners Permt. Relief So. (Wigan)	"	19451	11479
"	Lanc. & Yorks Ry. North Dock Sick & Ben. (L'pool)	"	79	—
"	Liverpool Cotton Porters F. So.	"	—	—
"	Liverpool Riggers F. Burial	"	—	—
"	Liverpool Timbermen's F. Burial	"	286	337
"	Mediterranean [Trade] F. Sick and Burial (Liverpool)	"	49	114
"	Pentonville Prison Officers (London)	"	63	92
"	River Mersey Steam Service Protective	"	—	—
"	Volunteer Service Accident Fund So. (Lond.)	"	15651	1563
"	West Sussex Police F. (Pulborough)	"	78	210
1873	Brentford Gas Works Provident So.	"	151	27
"	Caulane Miners Mut. Provident	"	82	39
"	Fishermen's and Sailors Mut. Aid (Grimsby)	"	44	58
"	German Waiters F. So. (Lond.)	"	39	98
"	Hammermens F. So. (London Unity)	"	27	63
"	Kingswood Coal Miners Amalg. F. So. (Glos'ter)	"	—	—
"	Independent Gas Makers (New Wortley, Leeds)	"	46	31
"	Liverpool Bookbinders Sick and Burial	"	—	—
"	Liverpool Gas Lighters Sick and Funeral	"	35	19
"	Liverpool Law Clerks	"	—	—
"	Liverpool Omnibus Benevolent	"	—	—
"	Midland Junc. Foundry Sick and F. (Holbeck, Leeds)	"	102	33
"	Millbank United Benefit So. (London)	"	131	95
"	Northern Counties Clerks Prov. (Newcastle-on-Tyne)	"	162	511
"	Rammersmen United F. So. (London)	"	45	100
"	"Staffordshire Advertiser" Sick Fund (Stafford)	"	11	48
"	Strikers U.K. Friendly (Manchester)	"	303	224
"	Tytrist Pits (Tredegar)	"	86	51
"	Victoria Boiler Makers Sick and Burial (Liverpool)	"	—	—
1874	Co-operative Slaters Accident and Burial (Liverpool)	"	—	—
"	Liverpool Bricklayers Friendly	"	—	—
"	Liverpool Journeymen Confectioners	"	—	—
"	Metropolitan Jewish Confinement, Mourning and Burial So. (London)	"	494	276
"	Miners Help (Pendlebury, Lanc.)	"	64	93
"	Miners Pride Lodge (Frizington, Cumberland)	"	161	118
"	Photographers Benevolent Asso. (London)	"	50	68
"	Pilsley Miners Benefit (Clay Cross, Derby)	"	132	133
1875	Albion Railway Waggon Works (Retford)	"	60	14
"	Butchers Sick and Burial (Liverpool)	"	—	—
"	Commercial Travellers Prov. (Manchester)	"	—	—
"	Customs Boatmen's Prov. Benefit	"	—	—
"	Doublers and Jobbers F. So. (Stockport)	"	—	—
"	First Lancashire Artillery Volunteers (Liverpool)	"	26	3
"	Mersey Sailmakers Burial	"	79	36
"	Mersey Shipwrights Sick and Benefit (Liverpool)	"	—	—
"	Miners F. (Brownhills, Stafford)	"	52	18
"	West Kent Agricultural Labourers Union F.	"	39	19
"	Liverpool Managers and Barmens Regis. and Benefit	"	—	—
"	Nut and Bolt Makers F. No. 2 (Manchester)	"	—	—

Scotland:

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1701	Burgesses and Trades Poor Box of Anstruther East	1875	—	£ 6217
1707	Lodge of Journeymen Masons (Edinburgh)	"	—	—
1725	Falkirk Gardeners So.	"	14	433
1728	Trades F. (Peterhead)	"	—	—
1749	So. of Weavers of Pollokshaws	"	77	2509
1756	Grand Antiquity So. of Glasgow	"	—	—
1759	Graham Charitable	"	—	6296
1765	Glasgow Journeymen Tobacco Spinners	"	—	—
"	Journeymen Bakers So. of Glasgow	"	—	—
1770	Glasgow Journeymen Coopers	"	93	845
1771	Printers and Bookbinders (Glasgow)	"	130	740
1772	Combmakers So. in Glasgow	"	—	—
1781	Beneficent So. in Borrowstounness	"	64	1585
1787	Journeymen Bakers of Edinburgh and Leith	"	170	687
"	Universal Highland So. of Glasgow	"	—	—
1789	Ayr Hammermen (Ayr)	"	—	—
1792	Mearns Farm (Kincardine)	"	15	8671
"	So. of Ministers in connexion with the United Presbyterian Church (Partick)	"	117	20,539
"	Widows Fund of the Faculty of Physicians and Surgeons (Glasgow)	"	45	24,438
1793	F. So. of Sons of Bakers in Glasgow	"	82	3265
"	Scottish Episcopal (Rothie)	"	78	30,504
1794	United F. So. of Flaxdressers (Dundee)	"	—	—
1795	Master Bakers	"	120	1847
"	So. of Skinners of Water of Leith	"	—	—
1797	F. So. of Dissenting Ministers of Scotland (Edin.)	"	162	29,648
1798	So. in Aberdeen for Benefit of Children of the Deceased Ministers of Church of Scot., etc.	"	—	—
1804	First Regiment of Glasgow Volunteers	"	—	—
1806	Stevenson Colliers (Stevenson)	"	—	—
1808	Glasgow Annuity So.	"	54	9386
1809	Journeymen Weavers (Bathgate)	"	51	361
1812	Dundee Harbour Porters or Philanthropic	"	115	1601
"	Dunkeld Carpenters	"	—	—
1813	F. So. of Fishermen of Cockenzie and Port Seton	"	—	—
"	Whitburn Whipmen	"	—	—
1815	Doura Coal Cutters (Doura)	"	—	—
"	Glasgow Journeymen Joiners Brotherly	"	—	—
1818	Edinburgh Bookbinders, Paper Rulers, and Pocket Book Makers Benefit	"	95	440
"	Glasgow Operative Brushmakers	"	—	—
1819	Glasgow Tobacco Spinners	"	—	—
1821	F. So. of Fishermen (Fisherow, Edin.)	"	158	740
"	Glasgow Upholsterers	"	—	—
1822	Edinburgh Industrial Blind F. Funeral	"	—	—
"	Greenock Journeymen Tailors	"	—	—
"	Renfrewshire Bleachers (Barrhead)	"	—	—
1823	Benefit So. of Colliers in Inveresk and Newton, etc. (Dalkeith)	"	126	134
1824	F. So. of Entered Porters of Leith, "The 36"	"	—	—
"	Edinburgh Compositors	"	177	2127
"	Glasgow Operative Masons	"	—	—
"	Incorp. of Porters of Leith, "The 48"	"	38	369
"	Journeymen Blacksmiths Friendly & Union (Glasgow)	"	—	—
"	Kingsmuir and Forfar Lodge of Weavers	"	—	—
1825	Glasgow Warehousemen's	"	—	—
1826	Associated Free and Accepted Camperdown Mason Lodge of F. So. of Dundee	"	—	—
1828	Edinburgh Fire Brigade F. Benefit	"	85	243
"	Edinburgh School of Arts [see 1828]	"	396	15,869
1829	Burntisland Funeral Ins.	"	5513	828
"	Prestonpans United So. of Carters	"	79	177
"	Scottish Ironmoulders (Glasgow)	"	—	—

Year of Etab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Fine a Week.
1830	Airdrie Weavers (Lanark)	1875	136	4
"	Dundee Operative Flaxdressers.....	"	—	432
1831	Adamsrow Laud. F. So. of Coll. & others in Edmondstone Colliery and places adjacent (Newton, Edin.)	"	163	241
"	Bannockburn Carpet Weavers	"	31	25
"	Braemar Highland	"	214	1061
"	Glasgow Journeymen Goldsmiths	"	—	—
"	Glasgow Operative Cordwainers	"	—	—
1832	F. So. of Master Butchers (Greenock)	"	—	—
"	Glasgow Police	"	—	—
"	Monkland Navigation (Langloan)	"	101	64
1833	Carron Founders (Carron).....	"	239	757
"	Gartsherrie Iron Works (Glasgow)	"	52	507
"	Gartsherrie Coalhewers F. and Funeral	"	196	510
1834	Dundee Shipwrights Philanthropic	"	—	—
"	Sea Box F. So. of St. Monance	"	—	—
"	Uni. Bro. So. of Wrights and Coopers of Cromarty	"	—	—
1835	Glasgow Boilermakers Funeral	"	—	—
"	Operative Tailors (Edinburgh)	"	—	—
1836	Dysart Sailors Benefit (Fife)	"	—	—
"	Fraternity of Dyers (Linlithgow)	"	—	—
1837	Commercial Travellers So. of Scot.	"	1343	33,264
1838	Glasgow Boilermakers	"	—	—
1840	City of Glasgow Annuity Endow. Asso.	"	—	—
1844	Grangemouth Miners	"	—	—
1845	Pensioners and Army Reserve F. Funeral (Glasgow)	"	821	253
"	Servants Institution (Edin.)	"	—	2934
"	So. of Free Fishermen of Newhaven	"	293	1829
1846	Edinburgh Operative Masons Benefit	"	834	4495
1847	Friendly So. (Aberdeen)	"	—	—
1851	Glasgow Journeymen Fleshers, Yearly and Permanent	"	—	—
1852	Hamilton Young Soldiers	"	55	344
1854	Glasgow United Fleshers	"	363	2832
1855	Forth Iron Works Friendly Funeral (Fife)	"	112	78
"	F. So. of Colliers & Workmen in Clackmannan Coll.	"	—	—
"	West of Scotland Domestic Servants	"	43	749
1856	Tranent Miners New	"	88	187
1857	Uni. General Sea Box of Borrowstounness [see 1634]	"	32	5963
1858	Rosewell Whitehill Colliery Funeral (Lasswode, Edin.)	"	171	84
1859	Glasgow Ironmongers and Iron Merchants	"	—	—
"	Glasgow Printers Mut. Improved	"	—	—
1860	Glasgow Letterpress Printers Permanent yearly	"	361	8
"	United Operative Plasterers of Edin.	"	—	—
"	Royal Midlothian Volunteer Artillery Benefit (Edin.)	"	—	—
1861	Aberdeen Operative Slaters	"	42	97
"	Glass Bottle-makers Friendly Aid	"	—	—
"	Edinburgh Cabmens Benefit	"	—	—
"	Edinburgh Type Founders Benefit	"	—	—
1862	City of Glasgow	"	55,062	14,929
1863	Haddington Benev. Twopence-a-week F. Yearly So.	"	—	—
"	United Order of Free Engine Keepers	"	—	—
1864	Glasgow Shipriggers and Mariners	"	191	301
1865	Chambernauld Brotherhood Weavers	"	76	154
"	Clyde Apprentice Boiler Makers and Iron Ship Builders (Partich)	"	—	—
1866	Ploughmen and Agricultural Labourers (Breachin)	"	—	—
1867	Edinburgh Gas Works Sick and Funeral Benefit	"	334	159
"	Evangelical Union Ministers Prov. Fund (Glasgow)	"	50	—
"	Glasgow Carters Permanent Sick and Funeral	"	—	—
"	National Asso. of Operative Boiler Makers and Iron Ship Builders (Glasgow)	"	—	—
1869	Dalkeith Farm Servants	"	85	72
1870	Broxburn Shale, Oil, and Coal Works	"	89	91
"	Operative Iron Moulders Asso. (Glasgow)	"	—	—
"	Poor Sea Box of St. Andrews	"	—	—
"	Port Glasgow Harbour Labourers	"	—	—

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1871	Benhar Coal and Ironstone Pits (Whitburn)	1875	142	£ 66
"	Dundee Old Sailors Union.....	"	75	39
"	Glasgow United Operative Plasterers Protective	"	—	—
"	Greenock Ship Riggers and Mariners	"	220	212
"	Holyrood Flint Glass Works Sick and Funeral	"	—	—
"	United F. So. of House and Ship Painters of Edin., Leith, and vicinity	"	—	—
1872	Coachmen and Grooms Benevolent F. (Edin.)	"	195	161
"	Edinburgh Gun Trade Sick and Funeral.....	"	35	25
"	Glasgow Clerks Improvement Asso.....	"	—	—
"	Greenock Sugar Porters Labourers	"	262	420
1873	Port Glasgow Shipwrights Benefit So.	"	35	55
"	Steam Towing Provident (Greenock)	"	71	152
1874	Edinburgh Deaf and Dumb Benevolent	"	—	1638
"	Glasgow and Suburbs Enginekeepers F. Permanent	"	230	42
"	Greenock Amalg. F. So. Medical Asso.	"	—	—

Ireland:

1798	Distressed Literary Teachers, & their Families (Dublin)	"	15	5323
1817	Drogheda Friendly Associated Coal Porters	"	—	—
1819	Amicable Brothers of the Methodist So. (Dublin)	"	45	297
1828	F. So. of Journeymen Butchers (Dublin)	"	35	5
1831	County & City of Cork Gen. Annu. & Endowment So.	"	131	37434
1833	Presbyterian Ministers (Seceders) W. & O. (Belfast)	"	—	—
1834	Bakers or Friendly Brothers of St. Anne (Dublin).....	"	600	61
1840	Halifax or Journeymen Saddlers (Dublin)	"	43	8
1841	Trinitarian F. (Waterford)	"	74	140
1844	Armagh Clerical Provident (Armagh)	"	26	8642
"	Chimney Sweepers Union of Trade and F. Brothers of St. Patrick (Dublin)	"	34	—
1845	Car Proprietors (Dublin)	"	—	—
"	Mariners Mort. (Wexford)	"	419	188
"	Pensioners Fermoy District	"	—	—
1848	Bakers (Waterford)	"	30	63
"	Military Invalids (Kilkenny)	"	—	—
1849	Waterford Annuity Asso.	"	12	9925
1850	Dundalk Bakers	"	—	—
"	Ossory Diocese Clergy Widows Fund (Kilkenny)	"	—	—
1851	Dublin Shop and Warehouse Porters	"	100	90
"	Shipmasters Mort. (Wexford)	"	35	91
1855	Shipwrights F. (Belfast)	"	206	312
1856	Linen Lappers (Belfast)	"	48	419
1857	Carpenters and Joiners Sick and Mort. (Belfast)	"	99	61
"	Old Man's and Orphan Fund (Dublin)	"	561	6
"	Provision Workers (Belfast)	"	40	47
1858	Clogher Diocese Clergy Widows Fund (Monaghan)	"	—	—
"	Flax Dressers Benevolent and Burial (Belfast)	"	—	—
1860	Irish Customs Benevolent (Dublin)	"	71	1264
"	Letter Carriers Gen. P. O. (Dublin)	"	45	14
"	Sawyers F. (Belfast)	"	37	50
1861	Flax Roughers Burial (Belfast)	"	—	—
"	New Shipwrights F. Mort. (Wexford)	"	55	53
1862	Ardfert and Aghadoe Clergy Widows Fund (Tralee)	"	26	1200
"	Carpenters & Joiners (2nd) Sick and Mort. (Belfast)	"	—	—
"	Dublin Mariners Sick and Burial	"	63	74
"	General Gaslight (Dublin)	"	—	—
"	Newry Stonemasons	"	28	34
1863	Grocers Assistants (Dublin)	"	83	515
"	Hackle and Gill Makers F. So. (Belfast)	"	76	411
1864	Flowery Land Mort. [? Burial] (Dublin)	"	154	10
"	Newry Stonecutters	"	24	2
1865	Butchers Porters, or F. Brothers of the Venerable Margaret Mary Alacoque	"	38	10
"	Glenmore Bleach Works (Lisburn)	"	310	55
"	Lithographic and Copperplate Printers (Belfast)	"	85	373

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1866	Meath Clerical	1875	80	£ 950
1867	Friendly Bakers of Carlow.....	"	15	31
1868	Ringsend Fisherman's So. of St. Patrick (Dublin).....	"	—	—
1869	Brick and Stone Layers (2nd Body), Dublin	"	—	—
"	Brick and Stone Pointers Accident and Bur. (Dublin)	"	21	6
"	Butchers (Londonderry)	"	23	65
1870	Enniscorthy Boatmen's Mort.	"	20	41
"	Flax Overlookers F. Benefit (Belfast)	"	62	329
1871	Breadservers United Benevolent (Belfast)	"	—	—
"	Drogheda Bakers, or St. Anne's	"	—	—
"	Dock Labourers Friendly (Belfast)	"	—	—
"	Mariners Benevolent (Belfast)	"	88	87
"	Packing Case Makers F. (Belfast)	"	—	—
"	Pork Butchers and Bacon Curers (Dublin)	"	56	20
1872	Coal Labourers F. Brothers Burial (Dublin)	"	—	—
"	Corn Meters F. Burial (Dublin)	"	—	—
"	Drogheda Mariners Sick and Burial.....	"	61	35
"	House Carpenters, or St. Joseph's	"	—	—
"	Linen Finishers Benevolent and F. Burial (Belfast)	"	—	—
"	Mill Sawyers F.	"	39	75
"	Newry Operative Bakers	"	—	—
"	Paviors F. (Belfast)	"	23	81
"	Waiters of Ireland Mut. Benefit (Dublin)	"	—	—
"	Vintners Benevolent Protective (Cork)	"	106	705
1873	Cork Bakers Benevolent	"	—	—
"	Galway Operative Bakers	"	45	39
"	Marine Stokers (Dublin)	"	54	20
"	Operative Bakers (Mullingar)	"	—	—
"	Operative Pork Butchers & Bacon Curers (Limerick)	"	40	5
"	Operative Bakers (Wexford)	"	33	4
"	Ropemakers Tontine (Dublin)	"	53	2
"	Shipriggers, Boatmen and Seamen's Burial (Belfast)	"	—	—
"	Ulster Warp and Weft Benevolent (Belfast)	"	—	—
1874	Longford Operative Bakers	"	—	—
"	Operative Bakers (Kilkenny)	"	32	13
"	Journeyman Poulterers Tontine So. S. James's (Dub.)	"	—	—
"	Mayo Operative Bakers	"	67	51

7. Dividing Societies.—Under date 1858 in this art. we have given an outline of these Sos., which are very much like Lotteries in disguise. The 4th Rep. of the Commissioners enters somewhat extensively into their working, and the evils resulting. We do not propose to follow in detail. It is but too palpable that the main object of F. Sos., viz. a provision in old age, must too often be defeated by the Clubs which divide their funds so soon as there is any accumulated fund in hand. The late Registrar (Mr. Pratt) had for some years refused to regis. these Sos. In Scot. and Ireland they got regis. In Scot. there is a large number of such Sos. There is a considerable number of these in Lond.—particularly in the neighbourhood of Bethnal Green and the Kingsland Road. They are here usually called "Birmingham" Sos.; but sometimes "Slate Sos." In Birmingham, however, there are very few of them. In Norfolk, and some other counties, they prevail largely. But inasmuch as they are not regis., it is impossible to say how many there may or may not be in existence.

The Commissioners say :

300. Generally, under the designation of "Sharing-out Club," they are very common in the agricultural districts of the Southern and Eastern counties. A witness who has had great experience in these districts [the Rev. J. Y. Stratton] states that "they appear to be increasing"; that the lower class of labourers, who cannot generally join the Affiliated Orders, commonly betake themselves to such Clubs; that they impede the work of an ordinary F. So., lead to direct evil, and pauperize the pop.; although it was admitted by the same witness that the dividing principle is not objectionable in the case of migratory employments, such as navvies employed in making a railway.

Sir Geo. Young is opposed to these Sos., and believes them to be decreasing rather than increasing; but this he attributes to the difficulties of their getting regis., rather than to any unwillingness on the part of members of F. Sos. "In fact, the action of the law appears to have screwed up the F. Sos. to a pitch of financial virtue in this respect a little higher than their natural tone."

He adds (p. 21) :

Sharing-out Clubs by no means always divide every year all the funds left over after satisfying current claims. The rule is, at all events among Town Clubs, to leave a certain sum in the box to go on with. For a Club of 100 members perhaps £100 will be required. In the country it is more

frequent that each member who continues in the Club shall subs. 10s. or some smaller sum for the same purpose. Neither is it by any means the intention of the system to send adrift at every division of the funds the members who may have appeared burdensome. In most cases a "drawing down" even to the last farthing of the stock, does not imply a dissolution and reconstruction of the Club. Some care is generally taken to provide for men actually in receipt of sick pay at the time of the drawing down. At the same time, a Club on this principle, however much it may repudiate the expulsion of its members as soon as they begin to need it, never does in practice, and never can provide for them: for the simple reason that if the old and sickly do not go, the young and healthy do. What is known as superannuation pay is rarely attempted. In most cases of prolonged sickness an advance is made of the whole or a part of the anticipated death benefit, after a certain amount of sick pay has been received; and the member is thereupon excluded. This is called "burying alive." In others, where the death benefit is provided for by levies, he is permitted to go on paying his levies, and so to entitle his representatives to claim his death benefit—while he is excluded from sick benefit and excused from regular contributions.

He states that the principle has nearly died out in some districts both of town and country. In Norwich he found only one small Sharing-out Club—"a genuine specimen of the old-fashioned free-and-easy surviving." In Bristol, on the other hand, there were several. At Southampton the sharing-out principle still held its ground "perhaps to a greater degree than any other place in the South of Eng." In the neighbourhood of Banbury, among 48 Clubs within the limits of the Poor Law Union, he found only 7 which divided their funds: "formerly the majority divided." He proceeds:

... At Hook Norton [Oxfordshire] is a Benefit Club of 104 members, regis. in 1859, on the dividing principle. Before regis. they were a "5-year Club," and such seem to have been most of the old Sharing-out Clubs in this district; but since they regis. they have divided every year "all the surplus over £100." The dividend has varied from 10s. to 12s. This so-called surplus is almost entirely accounted for by the hon. contributions. . . . The example of this Club has been of bad effect in the neighbourhood. . . . In the *Old Meeting F. So.* at Luton I found another Club of some importance, regis. and dividing its funds. In this case the regis. was just previous to the passing of the Act of 1853. The Registrar tried to prevent the insertion of the rule, but without success. There were in this Club 300 members, chiefly agricultural labourers; the reserve fund is £300, besides which each man subs. 4s. or 4s. 6d. after the division, for a fresh start. The Club has now lasted 30 years on these principles. The secret of the unusual prosperity is, that the death levy has been so fixed as to yield a large "profit" to the Club: the members pay 1s. 6d. a head and only £10 is given. Similarly, on the death of a member's wife, the levy is 1s., but only £5 is given. In the Club they profess to give half their sick pay, or 6s. a week to the end of the sickness; and they have had one or two prolonged cases. This is the only Sharing-out Club left in Luton. In the district round a few of the poorer sort divide, "whenever they get anything to divide."

In the Vale of Aylesbury "Seven-Year Clubs" are still very prevalent; and in Dorsetshire I found a 10-year Club at Maiden Newton, and heard of others. The Maiden Newton Club had 3 times reached its full term, dividing on the last occasion £10 11s. among 60 members. In all these Clubs the men invariably "leave" and "look to the parish"; and the younger men, in the market towns, who sometimes try them, speak of them with great contempt.

He adds:

A peculiar method of giving healthy members, who do not trouble the Club, some benefit from its funds is the practice of announcing "a free quarter," or return of one quarterly subs. I found this institution in a large Club at Cropredy [Oxfordshire], and was somewhat puzzled by it; but the explanation was afterwards supplied: it was done to evade the requirements of legislation. The 6s. returned as "free quarter" is merely another name for a 6s. dividend; and, like the dividend, it usually "benefits the publican." *A more direct violation of the law is the giving bonuses (independent of any actuary's valuation) to members who may have subscribed a long time—10 or 20 years—without claiming benefit.* This is said to work well, because it checks shamming, and prevents men coming on the box for a real illness if short; and many officers of Soss. strongly urge that it should be legalized. It seems, however, impossible to approve the bonus system, apart from the periodical valuation, on which it should be made to depend.

The Commissioners mention (p. lxxiv) a regis. So. at Staple-Fitzpaine, near Taunton, founded in 1836, wherein the dividing system has worked well; but this has been under special supervision.

A more recent title for the Sharing-out Clubs is that of "Tontine," and under this misleading description many of them will be found in the North-Western counties of Eng.; and especially in Lancashire. Mr. Stanley describes Liverpool as swarming with registered Tontines, which extend also into Cheshire; and he describes their working as follows:

They profess not to subject members to ann. re-election. At the same time there is nothing to prevent the younger members refusing to continue in the Club after the yearly dividend. Many of them pay a weekly contribution of 1s., besides levies for man. and for funerals; and they are largely used by the higher paid mechanics. There is enough common sense for the mass of the members to understand perfectly that they are not a sure dependence for permanent sickness; and many of the members are also in a permanent Club. Still there is no doubt that to some extent they do stand in the way of sounder organizations. Their management is very various; some meet at schools, and aim at strict economy, so as to swell the dividend; others meet at the public-house, and have a yearly dinner.

Mr. Stanley gives (p. 128) a T. of some 50 of these Soss. which he found existing in the East of Lond., showing their numbers; their income from contributions, from entrances, fines, and interest; amount divided at the end of the year, sum carried forward, and cost of management. The contributions he found to average £1 15s. 1d. a year p. head; the dividend was 13s. 5d.; and the amount carried forward was £1 19s. 6d. p. head. The cost of man. was about 9½ p.c. of the contributions. In several of them the sums carried forward were quite as considerable as in the bulk of the Affiliated Orders. He draws attention to several of the more remarkable of this class in other parts of the kingdom, thus:

In Coventry there is the *Friendly Union So.*, founded in 1778, and which had in 1871 50 members, who each contributed 6d. p. week. The sick benefits are 8s. 6d. a week

for 6 months, then 5s. for the rest of the sickness. The death benefit is 10s. 6d. for a member, and £5 for a member's wife; 10s. 6d. is allowed on the birth of each child, and there is medical attendance which costs 3s. p. head. The dividend has ranged from 5s. up to 14s. Very few of the members leave the So.—not 5 in the last 20 years. Have they got rid of any of their old members. The average age of the members Mr. Stanley wrote was about 45, which was an increase upon some former years. He had a reserve of £133, "but they never used to touch it, for they always had a dividend." [In 1875 there were 51 members, with funds of £152.] Former benefits were not so high as now. The whole cost of man. was about £3 a year. He at one time had lodge liquor and a feast. They levy 6d. a member for a fund which only gives £1 5s. The members are nearly all wage-earning men, and claim no funds if they are sick. The So. is registered. Such is a short hist. of this Friendly Society of its class.

In Birmingham the *Union Provident Sick So.* was founded in 1802, but not registered till 1826. It has an express rule for an ann. division. It gives the ordinary benefits of sick pay, medical attendance, and funerals—the allowance for this last being £30 for a member, and £8 for a member's wife—which latter is deducted from the former: a remarkable provision. The members are divided into four sections, A, B, C, and D, according to ages—A being the oldest section. The total income from contributions in 1870 was £7302; the disbursements of the year as follows: sick pay, £1961; medical attendance, £410; funerals, £1198; dividend, £3096, or approximating to the total of all the other disbursements. The expenses of man. were £325, or less than 4s. p. head. In 1856 the So. consisted of 1785 members; the dividend of the year was 25s. 2d. each. In the following year the div. was only 19s. 4d. In 1861 it was 21s. Since 1861 it appears to have remained at about 19s. p.a.; but the members had been gradually increasing, and in 1871 had reached 3519. In 1870 the members struck off for non-payment were, in sec. A, 13; B, 25; C, 32; D, 98. Every year 2s. is stopped out of each member's dividend, and carried into a sinking fund. This fund is liable for the benefits of the members, if the year's contributions should be insufficient to meet the outgoings. *Subject to that, the principal of the fund belongs to the members: the proportion of each to be drawn out on his death.* The accruing int. on the fund belongs to the So. at large, as also the proportion of the fund belonging to the members who withdraw. In 1871 the fund stood at £8269.

In the Staffordshire Potteries there were found 3 regis. "*Dividend Sos.*," concerning which the Hon. Mr. Stanley gives some details. They each had a "permanent stock." The *New F. Dividend So.* at Stoke-upon-Trent had 104 members, with a fund of £2114; the *Lily of the Valley F.*, of the same place, with 143 members, and £1071; and the *St. George's Div. So.* at Newcastle-under-Lyne, with 366 members, and £3540. The Commissioners remark hereon: "It will be seen at a glance that the funds of these 3 Sos., in proportion to the number of their members, are far beyond the average of F. Sos." There were other flourishing Sos. of this class in the same district.

In Sheffield the condition of the Dividing Sos. was found less satisfactory; but there were the first signs of an improved organization. Mr. Stanley says:

There are in Sheffield a good many Dividing Clubs, generally called Birmingham Clubs, or Free Gifts. As they have no funds in hand, and are precarious in their duration, a Funeral So. has been formed for some of them to work as a District in an Order does, and equalize the death payments. It is called the *United Friendly Funeral So.*, and is made up of 7 Free Gift Sos. The total number of members is 200, and they have £158 in hand. A member leaving his Div. Club, may still, if he satisfy the Committee, continue in this So. for his Funeral Benefit. The So. has been in existence since 1859, and the levies are made and accounts balanced quarterly. Sos. are represented in this manner—one delegate for a So. with less than 100 members; 2 delegates for a So. with more than 100 members.

Proceeding further north, to Newcastle-on-Tyne, the "*Unregistered Yearly Sos.*" present an altogether new organization, of which we have but an outline in the case of Sheffield. They are here formed into the "*Newcastle and Gateshead Central Union*," of which Mr. Culley (Rep. p. 155) gives the following account, drawn from the evidence of Mr. Shipley, the Sec. of that organization:

There are in connexion with the N. and G. C. Union 304 Sos., numbering 14,462 members. The ann. payments into these Sos. in the shape of contributions, fines, levies, and lot money amount to the sum of £46,565 15s.; and by the ann. returns sent to the Union by each So., their expenditure for sick and funerals amounts to an average per year for 26 years—sick, £4360 17s. 6d.; funerals, £2443 3s. 4d. The amount paid for sick for 26 years is £113,382 14s. 11d.; and for funerals, £63,522 7s. 6d.—making a total of £176,905 2s. 6d. paid by the Ann. Sos. of Newcastle and Gateshead! Moreover, a So. has been formed in connexion with the Central Union which is called the *Refuge Benefit So.*, for taking in members of the Sos. belonging to the Union which may break up. If any So. thinks it is unable to meet its demands of sick and funerals, they apply to the Committee of the Union, who examine their books, and if found correct, the whole of the members are admitted, whether they are in good health or not, and whatever their age may be; and they pay their contributions into and receive their benefits from it the same as if their own So. was existing. This So. is a permanent one; none of its funds are divided, and to assist it, the majority of the Sos. in the Union sub. 2d. p. member p.a. to its funds.

It appears even here that the Dividing or Yearly Sos. have been falling off as the Affiliated Sos. gained ground. In 1872 there were only some 250 of them; formerly there had been 400.

Going yet further north, into Scotland, "we enter (say the Commissioners, p. lxxviii)

a region in which registration is the exception, and no longer the rule; and where *Dividing Sos.*, in one form or other, are the prevailing type in large tracts of country, and are generally combined with a loan and deposit system." In the Cupar District of Fifeshire, Mr. Culley found none but unregistered Yearly Sos.; in the Dunse district (Berwickshire), and in the Kelso district (Roxburghshire), much the same state of things prevailed. In the Haddington district it was even worse. Here prevails the system of Permanent Dividing Sos.—said to be very popular in Edinburgh and Glasgow, and the surrounding districts. Mr. Culley says (p. 45):

These differ from the ordinary Yearly Dividing Sos. in not subjecting their members to an ann. election, and in retaining a small sum to meet contingencies at the time of the ann. division. To enable the scheme to stand, it is of course necessary to limit the extent of benefit any member can receive from the So.; and in the case of these two Sos. [in the Haddington district] the sick aliment is limited to "52 weeks of continual sickness." "At the end of 52 weeks his aliment shall entirely cease, but he may continue to be a member, not being entitled to aliment for that disorder again, unless free of it for six months." Both Sos. retain 1s. p.a. p. member; and the *East Lothian Benefit So.* has for 3 years added £5 to the contingent fund. . . .

In the Haddington Yearly Sos. generally 6d. p. head is now left at the time of division.

In the Inverness district, out of 15 F. Sos., 11 were Yearly, and all unregistered. In the Aberdeen district, out of a total of 80 Sos., there were 60 Yearly Deposit Sos., all unregistered. These had 6312 members, and were formed into a Union after the manner of those in the Newcastle district already spoken of. In Edinburgh, the Yearly Sos., "which are numerous, do no not appear to bear so good a character as in the rest of Scot." The officers of these Sos. here have a Protection Asso., organized in 1862, which every year publishes a list "containing the names of shamming and dilatory members. The names are sent to the Union Sec. by the treasurers of the different Sos.; and the list is supplied to each So. belonging to the Union at a charge of 1s." In the Ayr district Yearly Sos. were hardly found to exist.

The practice of having two Sos., dividing alternately every 6 months, is very common in Scot.; the same persons very generally being members of both. The Affiliated Sos. are, however, gradually superseding these Dividing Sos. in Scotland.

As to *Ireland*, the Yearly or Dividing, as well as nearly all other F. Sos., are regis. In Dublin the Dividing Sos. are also termed "Tontines"—but this does not imply division of funds; but means simply "a So. which gives an allowance during sickness, a sum at death, and generally a small superannuation allowance or pension"—it is in fact the designation for an ordinary F. So. For the purpose of obtaining regis. in Ireland, it had become the practice for the Dividing Sos. there to build up a separate fund for the purpose of division; but we are not told how this is accomplished. Mr. Daniell, the Assistant Commissioner, who conducted the investigation of the Commission in Ireland, came to the opinion that the "Dividing System" worked equitably and well there. (*Vide* his Report, p. 5-7.)

The Commissioners close this important section of their Rep. with the following words: "The enormous difficulty and complexity of the problem, how this class of Sos. are to be dealt with, will be evident from the facts and opinions above stated." (p. lxxxiii.)

8. Deposit F. Sos.—The Commissioners' Rep. says regarding these: "The type is one which has not developed itself from the necessities of self-governed bodies, but has been introduced from outside; and which as yet only appears to extend itself through the favour shown to it by benevolent persons, not connected as benefit members, with F. Sos." We have, under date 1831, given an account of the Deposit system, as introduced, and worked by the *Abbot's Ann. Prov. So.* (Hampshire) then founded. While under date 1868 we have given an outline of the plan of the *Surrey Deposit So.* (now *National Deposit*) then founded.

The Commissioners, in continuation of the foregoing, say (p. lxxxiii):

It [the Deposit system] is thus only to be found as yet in County Sos., or in patronized local ones; except that in one instance it has taken flight beyond County limits, and seeks, while recognizing those limits, to expand itself to national proportions. With the exception of the small Nottinghamshire So. [The *Nottingham County F.*, 1850], and of the Mansfield Woodhouse So. [1862], which has served as its model—the system followed by which is somewhat peculiar—the type appears to be, as yet, entirely confined to Sir Geo. Young's District of the Eastern and Southern Counties.

It is further pointed out that the Deposit Sos. of the present class have nothing in common with the Deposit and Loan F. Sos. of Scot.; and the Commissioners justly add: "In order to understand the system, we must discard any previous views which we may have formed of the nature of a F. So." It is also pointed out that in the *Hampshire So.*, and the *National Deposit*, the classes of members are now reduced to 4:

A. Males at the time of their admission in good health, having no hereditary complaint in their family, and not following any unhealthy trade.

B. Males, being themselves healthy, but having an hereditary complaint in their family; and not following any unhealthy trade. Healthy females, having no hereditary complaint in their family, and not following any unhealthy trade.

C. Males of doubtful health, or following an unhealthy trade. Females, themselves healthy, but having an hereditary complaint in their family, and not following any unhealthy trade.

D. Females of doubtful health, or following an unhealthy trade.

For every complete period of 10 years above 25, if men; above 30, if women, members are lowered a class; but no candidate is to be admitted, whose health and age together would place him or her below class D. In these latter Sos., too, there is no absolute limitation of sick allowance; but it must not exceed the average amount of the member's earnings.

Much difference of opinion exists as to the value of the Deposit principle; and the Commissioners quote the views of Sir Geo. Young thereon. We cannot do better than follow this example:

The equity of the principle, as between member and member, depends entirely upon the difference fixed between the several classes by the rules. I may be allowed, perhaps, to point out that the way to derive these from the ascertained or estimated number of days of sickness, or "experience return" of the several classes, is to make the number of pence claimable by each class from the fund be every 1s. of sick-pay proportional to the reciprocal of the average of sickness. Thus, Mr. Best's scale—which allows the members of the 4 classes to claim from the fund 9d., 8d., 6d., and 4d. in the 1s., respectively—is fair if, and only if, the average days of sickness among members of the 4 classes is found to be in the proportion of one-ninth, one-eighth, one-sixth, and one-fourth—thus is as 8:9:12:18. A man twice as liable to sickness as his neighbour should receive only half as much subsidy, and so on. In this calculation no account has been taken of the disadvantage incident to a member of a lower class, as compared with a higher, that by the greater drain upon his own deposit, its exhaustion, and his consequent exclusion from the club, in case of prolonged sickness, will be more speedy. . . .

I do not think it is possible to find an arithmetical rule for so regulating the subsidy as to avert the withdrawal of deposits, or to insure to any particular member that if he falls sick there will be sufficient to pay his claim until the conclusion of his sickness, or exhaustion of his deposit. The theory of the system leaves it clearly possible that on any given day the whole concern may be wound up; the entire fund deposited withdrawn by the depositors, and the recipients of sick-pay left in the lurch. In practice this danger would appear chimerical: since it is clearly for the interest of a man who has a tolerable deposit, and has grown older since he began to save it, to leave it where it lies—promising him security against sickness, as long as he does not peremptorily need it for other purposes. In short, the Deposit system stands, in this respect, on the same footing with the Sharing-out Clubs—in which no actuary, I imagine, would undertake to calculate the proper proportion of "dividend" to "benefits." It differs from that system in the element of permanence, which it obtains through resting on a savings bank for the basis, and in the avoidance of the waste inseparable from a Sharing-out Club, through its not distributing any "surplus"; or rather, through its never absorbing the spare funds of individual members; and distributing all that it does distribute in the form of benefit.

While on the whole favourable to the system, he admits that it may be "urged against the Deposit Club, as it is urged with justice against the Sharing-out Club, that it makes no provision against the constantly increasing liability caused by the members growing older, and consequently more sickly." He adds: "No doubt, if the amount of deposits does not increase, while the sickness rate is constantly increasing, the contributions levied upon the deposits must become gradually heavier. But this will not of necessity lead to the same fatal consequences experienced in levy clubs of the ordinary sort." And he enlarges upon the reasons for this in some detail.

In the *Foresters Miscellany* (April, 1873) the system of the *National Deposit So.* is assailed with considerable severity. The main objections urged are that it would lead the working classes to a false confidence: since the minimum deposit of 12 months contribution, even in class A., amounts only, with the subsidy, to a provision for 8 weeks sickness—diminishing to 3 for class D; that the proviso excluding members from sick-pay during the 12 months grace after the exhaustion of their deposit—if they have ever withdrawn any part of it except for sick or medical pay—below their own share of 12 months sick-pay; or from old-age allowance during the corresponding years of grace—if during the previous 10 years they have drawn any part of it, except for sick or old-age pay—renders the boon nugatory; etc., etc. The Commissioners say: "It is to be suspected that the criticisms, although apparently somewhat impassioned, hit not a few blots in the system"; and they add (p. lxxxix):

It is perhaps to be regretted that the Deposit F. Sos. should ever have been regis. under the F. Sos. Acts. They are indeed essentially Savings Banks rather than F. Sos. The security of provision which it is of the essence of the F. So. to insure—however it may fall short of really doing so—they do not profess to give. They are primarily individual, not social. Were they certified under the Savings Bank Acts, all misapprehensions of their true character would cease; and they would be recognized as an ingenious attempt, from the savings bank ground, to supply most of the objects which are aimed at by F. Sos.

The Rep. proceeds to point out that while the term "Deposit F. So." appears to be monopolized by bodies of the Abbot's Ann pattern, there are scattered throughout the country, and especially in the Midland districts, F. Sos. with ordinary deposit or savings bank branches or departments. Thus at Birmingham, the *Gen. Prov. and Benevolent Inst.* has an independent fund from which members may withdraw their money; but which is very little used. The *Christ Church Prov. Inst.* in the same town has also a savings fund for those who by age or infirmity, or owing to their dangerous employment, cannot join a sick club; "and also for other persons"—2½ p.c. is paid on all deposits above 5s. Here no member can deposit more than £30 a year; nor more than £150 in all. A fortnight's notice may be required before repayment, or 21 days where the sum withdrawn is over £20—"terms which, through their liberality, contrast strongly with those of the *National Deposit So.*" The *New Meeting Prov. Inst.* of the same town has also a savings fund; so also the *Alcester Becher Club* (same county) has a provident or savings bank in connexion with it. The *Nottingham County F. So.*, in

addition to a deposit or ordinary savings bank branch, has adopted the "Bank system," which differs in several respects from the *Abbot's Ann* deposit plan; but which (say the Commissioners) "prevails in a small group of Sos., of which the earliest founded seems to have been one at West Charlton, in Somerset [1855]; followed by one at Mansfield Woodhouse, Notts [1862]; and by the Nottingham County So. itself."

In the Mansfield Woodhouse So. there exists the following rule:

X. That when a member's bank is exhausted, he shall not be entitled to draw any sickness pay out of the common fund, until after the next Yearly Rep. and division of the surplus of the common fund are made.

Members may be admitted at any of the quarterly meetings, but only those who are admitted in Jan. (or who pay subs. back to that month) are entitled to share in the surplus of the common fund.

The chief differences in the last-named Sos. from the *Abbot's Ann* So. appear to be these—1. The contribution is fixed and uniform, and not optional. 2. The benefit (sickness only) is likewise fixed and uniform. 3. The benefit is paid for 8 weeks out of the common fund only; after that, partly out of the common fund, and partly out of the member's own deposit or "bank." 4. The yearly surplus is distributed, not amongst the several funds of the So., but among the individual members, forming their "banks," as before mentioned. "It will thus be seen (say the Commissioners) that a So. of this type resembles to a great extent a Yearly Dividing So., except so far that it does not pay the dividend, but retains it for the member's benefit." They add (p. xc.):

410. The system has its enthusiastic supporters. Archdeacon Fitzgerald in his pamph. [see 1861] . . . says: "I venture to think that the more the Charlton system becomes known, the more generally will it be adopted, as being the safest, the simplest, the cheapest on which a F. So. can be estab." The Rev. Prebendary Miles . . . says: "The principle is to my mind exactly the thing needed in country districts: as it takes in any age; teaches thriftiness by each having a bank; prevents fraud in lying too long on the funds of the So.; is easily managed; and in most cases makes some provision for old age"; and again, "The Bank system is to my mind perfect." It does not, however, appear as yet to have attained much popularity. The system is certainly much simpler in its working than the Deposit system F. Sos. of the *Abbot's Ann* type; and admits prob. of being more easily tested. But it is difficult to see how a So. formed on the principle of uniform contributions and benefits can be offered as a thoroughly satisfactory solution of the F. So. problem.

To which we say, Amen!

9. Collecting Sos., and Burial Sos. Generally.—Regarding the Sos. of this class, so much interest has of late years been expressed, and so many charges laid against them, that the labours of the Commission—and especially of the Assistant Commissioners—were very largely directed towards them. As the result, the portion of the Rep. devoted to them occupies 50 folio pages. We can follow it only in outline. As to the grouping embodied in the title of this section, the Commissioners remark (p. xci):

411. Under the above head we are forced to include Sos. differing widely in their characteristics: so that they cannot be said to form a single class; but yet so closely interconnected that it would be impossible to separate them without tediously minute subdivision. The great bulk of Collecting Sos. are Burial Sos.; the great bulk of Burial Sos. are Collecting Sos. But collecting Sick and Burial Sos. run so imperceptibly into Burial Sos., that any distinction between them would be almost pedantic; and certain collecting Burial Sos. stand so near to the few non-collecting ones, that it would be almost misleading to class the latter apart.

Mr. Stanley remarks upon the varying origin of Burial Sos.: "Sometimes they are the last remnant of a Sick and Burial So.—which, from insufficient contributions or bad management, has long failed as a Sick So.—but is still kept up to insure the members from the disgrace of a pauper funeral. This I have noticed especially among some Sos. of women." "In Kidderminster there is such a So., which is all that is left of a Weavers' Trades Union." Some of the Burial Sos., again, have grown out of some special asso. for other purposes—such as the *South Yorkshire* Burial So. at Sheffield, "which is a rich So. for its size, and gives large benefits." In the West Riding of Yorkshire more especially is often found a more rudimentary form of asso., where, there being no accumulated fund, a levy is made on the members (through a collector, who gets a small fee for his trouble) upon what is called a "Funeral Brief"—after the manner of the old "King's Briefs," which we have described in detail under FIRE BRIEFS.

The location of the Burial Sos. of the U.K. is a matter of some interest; and appears within the last quarter of a century to have undergone some considerable change. *Lancashire* is now the main habitat, "and as it were the chief centre of diffusion for Eng. and Ireland, of the Burial So. proper"—that is, of the *collecting class*. Here it is interesting to remark that out of more than 100 Gild Ordinances furnished to Parl. nearly five centuries ago (in 1383), the single return from Lancashire—that of the "Gild of the Holy Trinity and St. Leonard" of Lancaster—provides that "collectors shall be appointed to gather all dues." [FUNERALS; GILDS.]

In this connexion the following T. of Burial Sos. existing in E. and W. in 1850, extracted from the Returns of F. Sos. made to Parl. in 1852 [our detailed remarks upon this Return will be found under date 1852], will be instructive. It was required that the Burial Sos. of each county—being nothing more than Burial Sos.—should be returned separately. But here it has to be remembered that the demand for returns was only extended to such Sos. as were registered, and it will appear hereafter that many of the Burial Sos. which are now so prominent either were not then in existence, or certainly were not registered.

COUNTIES.	TOWNS.	Date of Etab.	No. of Members.	Ann. Income.	Accumu- lated Fund
CHESHIRE.	Knutsford	—	1007	£	£
	Northwich	1839	223	42	848 139
CORNWALL.	Stratton	1842	86	8	21
	Penryn	1838	169	252	671
	Bude	1842	49	4	31
	Congleton	1834	9086	794	279
	Falmouth	1843	953	309	233
	Flushing	1833	455	212	115
DEVONSHIRE.	Bishop's Teignton	1833	112	—	71
	Devonport	1806	1429	928	9194
	Ditto	1786	106	—	95
	Ditto	1830	519	337	5156
	Ditto	1815	1456	—	3385
	Ditto	1838	160	—	127
	Ditto	1829	95	—	2137
	Modbury	1835	126	32	40
	Moreton Hampstead	1828	50	8	60
	Ditto	1823	210	49	175
	Newton Abbot	1825	276	—	—
	Plymstock	1844	209	—	10
	Sandford	1826	200	—	200
DORSETSHIRE.	Cheddington	1842	65	39	402
DURHAM.	Chester-le-Street	1830	76	—	76
	Ditto	1846	155	65	35
	East Rainton	1814	107	—	72
	Gateshead	1840	53	—	—
	Hetton-le-Hole	1837	216	—	241
	Low Felling	1822	87	—	149
	Pittington (No. 1)	1832	114	—	34
	Ditto (No. 2)	1833	177	72	38
	Ditto (No. 3)	1842	104	42	46
	St. Helens, Auckland	1837	230	—	70
	West Rainton	1824	114	—	42
HAMPSHIRE.	Bishopstoke	1834	201	—	159
	Carisbrooke	1828	192	—	224
	Cowes, West	1825	93	28	53
	Fareham	1834	103	—	89
	Ditto	1840	74	—	67
	Newport, Isle of Wight	1837	100	—	107
	Ditto	1840	95	43	113
	Ditto	1842	1166	—	358
	Ditto	1846	133	—	7
	Portsea (No. 1)	1809	1263	1198	742
	Ditto (No. 2)	1809	467	607	126
	Ditto (No. 3)	1817	167	112	4634
	Ditto (No. 4)	1818	2265	—	2945
	Ditto (No. 5)	1833	972	800	330
	Ditto (No. 6)	1845	1197	643	467
	Southwich	1835	38	8	74
HEREFORDSHIRE.	Hereford	1845	16	—	16
KENT.	Deptford	1843	334	—	3
	Dover	1838	329	—	11
	Ditto	1838	336	—	154
	Ditto	1840	422	—	32
	Farleigh East	1840	440	—	32
	Faversham	1839	464	11	62
	Ditto	1841	381	—	—
	Greenwich	1840	450	—	—
	Ditto	1841	247	—	—

COUNTIES.	TOWNS.	Date of Estab.	No. of Members.	Ann. Income.	Accumulated Fund
KENT.	Greenwich	1844	257	—	—
	Loose	1841	524	—	—
	Ditto	1843	435	—	—
	Maidstone	1840	168	—	23
	Ditto	1841	397	—	10
	Ditto	1842	162	—	285
	Ditto	1842	260	—	84
	Ditto	1842	321	—	236
	Ditto	1843	127	—	11
	Ditto	1843	384	—	155
	Ditto	1843	128	—	26
	Ditto	1844	406	—	45
	Ramsgate	1839	317	—	9
	Ditto	1844	246	—	496
	Tonbridge	1843	222	—	114
	Ditto	1844	225	—	74
	Ditto	1845	220	—	—
	Woolwich	1772	25	—	40
	Ditto	1785	17	—	73
	Ditto	1835	336	—	154
	Ditto	1837	94	—	—
	Ditto	1841	205	—	—
	Ditto	1845	319	—	37
	Ditto	1845	230	—	647
LANCASHIRE.	Ashton-under-Lyne	1838	1297	—	266
	Ditto	1839	47	—	—
	Blackburn	1824	82	33	224
	Ditto	1839	44699	—	4298
	Chorlton-upon-Medlock	1825	1380	172	151
	Faiilsworth	1827	2339	137	303
	Liverpool	1841	123	—	75
	Manchester	1803	175	—	45
	Ditto	1818	741	—	818
	Ditto	1824	6820	—	2536
	Ditto	1825	694	75	304
	Ditto	1830	600	—	7
	Ditto	1842	298	—	701
	Ditto	1845	82	70	122
	Middleton	1839	341	—	60
	Ormskirk	1836	63	—	80
	Ditto	—	595	54	24
	Preston	1835	3976	613	358
	Prestwich	—	32	—	72
	Salford	1830	—	—	102
	Ditto	1843	159	—	130
	Stalybridge	1828	6867	1115	1290
	Walton-on-the-Hill	1845	21	—	16
LEICESTERSHIRE.	Hinckley	1834	158	—	1446
LONDON, CITY OF	Milton Street	1832	31	—	72
	Duke's Place	1834	180	—	418
	Aldersgate Street	1836	110	—	—
	Queen Street	1839	29	18	187
	Houndsditch	1846	81	—	58
MIDDLESEX.	Wheeler Street	1817	69	20	136
	Hatton Garden	1821	104	60	286
	Phipp Street	1824	122	—	—
	New Road	1827	47	20	317
	Club Row	1828	50	15	97
	Cambridge Road	1829	67	31	70
	Seabright Street	1831	96	—	227
	Chancery Lane	1832	770	357	709
	Old Gravel Lane	1835	66	—	303

COUNTIES.	TOWNS.	Date of Estab.	No. of Members.	Ann. Income.	Accumulated Fund.
MIDDLESEX.	Francis Street	1840	66	£86	£325
	Gt. Russell Street	1841	61	—	280
	St. George's East	1841	1062	316	1264
	Wellclose Square	1842	233	—	240
	Pentonville	1843	32	—	65
	Romney Terrace	1844	56	26	100
	Upper Ebury Street	1845	167	—	71
NORTHUMBERLAND.	Bramston	1832	103	20	166
	Milfield	1824	253	57	227
	Newcastle-on-Tyne	1842	57	98	—
SHROPSHIRE.	Shiffnal	1840	2998	—	44
STAFFORDSHIRE.	Kingswinford	1841	184	—	—
	Ditto	1844	46	—	—
	Ditto	—	—	—	20
	Leek	1830	66	—	—
	Wednesbury	1843	113	—	45
SURREY.	Newington	1835	36	—	—
	Ditto	1843	334	—	9
	Rotherhithe	1845	242	—	—
SUSSEX.	Ore	1844	997	274	—
WARWICKSHIRE.	Coventry	1839	2850	—	342
	Ditto	—	1162	145	312
WORCESTERSHIRE.	Worcester	1845	183	—	170
YORKSHIRE.	Almondbury	1814	24	14	136
	Wakefield	1825	142	—	10
WALES.	Pembroke	1823	521	—	380

Returning to the Rep. of the Commissioners, the following details are given regarding the numbers and location of F. Sos. in 1872—that is, such of them as made returns to the Registrar. 23 English and 3 Welsh Counties had Sos. exclusively for burials. Of a total of 211 Sos. enumerated, only 4 counties had more than 10, viz. Lancashire 89, Cheshire 24, Kent 18, and Middlesex 12. Lancashire thus had 42·2 p.c. of the whole number; and Lancashire and Cheshire 53·6 p.c. These returns, however, were known not to be complete. Mr. Stanley remarks: "We can trace to a common ancestry similar Sos. in remote towns. Thus in Coventry and in Derby, Burial Sos. are to be found, brought thither by silk-weavers from Congleton; and thriving with all their Cheshire peculiarities, though planted in a foreign soil. Sometimes the origin of a So. is lost; but we cannot doubt from similarity of rules that there has been a connexion, the tradition of which has disappeared." The Commissioners say: "Amongst Burial Sos. the great distinction is between the Local and the General." They accordingly divide all the Sos. into 3 distinctive classes, under which we now proceed to examine them.

I. Local Burial Sos., and Local Sick and Burial Collecting Sos.—Mr. Stanley says: "The Local Burial Sos. alone really have something of the character of F. Sos. The others, working under the F. Sos. Acts, are really *Ins. Offices*, started without any capital, and under the control of no shareholders: conducted principally for the benefit of the office-holders, and only incidentally for that of the assured;" and further:

The Burial Sos., in so far as they have an elaborate machinery of paid collectors, tend to degenerate into the same condition as the large General Sos. The best are those which are most primitive—where the collectors are ordinary members, and have least of the professional character. Again, Local Burial Sos. for adults are better managed than those which include children: as all the members are capable of conducting the affairs of the So. Where women and children, or lads, are admitted to transact bus., there is more chance of packing a meeting, and less chance of serious discussion: to say nothing of the mischief of public-house meetings, where often a certain amount of liquor out of the funds has to be consumed for the good of the house.

The Commissioners consider the same observations apply to Local Sick and Burial Collecting Sos. The number of important Burial Sos. which do not employ collectors is very small.

Mr. Stanley's Rep. furnishes the materials for the following *T. of Local Burial Sos. with more than 1000 members*—but this is exclusive of other groups of Local Sos. to be mentioned afterwards:

Date of Estab.	Name of Society.	No. of Members.	Funds.	Cost of Man.	Cost of Collection.
1839	Tunstall Benevolent.....	17,545	£ 5,303	p.c. 17	p.c. 10
1828	Stalybridge Good Intent.....	13,000	1,482	9½	5
—	Congleton Burial	12,525	1,233	—	13
—	Mossley Economical	11,970	1,438	10½	—
1838	Original Coventry	11,696	5,846	18½	12½
1844	Church General Burial	7,500	2,843	20	13½
—	Glossopdale	6,000	925	11½	6
1826	Birtenshaw School	4,716	112	10	5½
—	Hull Good Design	3,121	817	} 20	} 13
—	Hull Good Intent	2,587	1,257		
—	Hull Flower of the Forest	2,343	580		
—	Carlisle Friendly	1,800	1,310		
1850	Lees Economical	1,729	305	9	—
Totals		95,992	£23,451		

These figures, we presume, relate to a period earlier than 1872, although it is not so stated. The Registrar's returns for that year show a considerable increase as to several of the Sos. The following are the local "groups" of Burial Sos. referred to:

1. *Manchester District*—including Salford, Hulme, and Ardwick.

Date of Estab.	Name of Society.	No. of Members.	Funds.	Cost of Man.	Cost of Collection.
1854	Salford Funeral Friendly	16,600	£ 3,547	p.c. 16½	p.c. 8
1818	New United F.	14,599	2,947	30	20
1827	South Manchester	10,700	10,008	17	10
1828	Philanthropic (Manchester)	9,000	1,397	16½	10
1834	First Temperance (Salford)	8,400	8,774	22½	15
1824	Second Philanthropic (Manchester)	8,000	2,798	17¾	? 10
1833	Hulme Friendly	6,923	4,392	21	10
1844	Equitable Total Abstinence(Manch.)	6,500	1,243	30	12½
—	Salford Independent	6,150	606	10½	5
1847	Second Temperance	5,800	673	20	15
1833	Hulme Good Intent	4,000	1,078	26	12½
—	Persevering Munificent	3,300	63	30	15
1840	Hulme Philanthropic	2,460	1,500	23	12½
1835	Independent (Manchester)	2,200	294	27	11½
1824	Manchester Arms	2,000	300	—	10
1825	George and Dragon (Ardwick)	1,590	360	18½	7½
1863	Ancoats (Manchester)	1,500	150	22	15
1818	Mortality Asso. (Manchester)	561	798	30	10
—	Scotch Church (Hulme).....	451	563	28	15
Totals		110,734	£41,491		

Of this group of 19 it was found that 14 were regis., and 3 had deposited their rules.

2. The *Preston* group of Burial Sos. :—

Date of Estab.	Name of Society.	No. of Members.	Funds.	Cost of Man.	Cost of Collection.
1825	Original Legal Friendly	36,222	£ 8,815	p.c. 17½	p.c. 12½
1844	Catholic Burial	12,368	1,791	17½	12½
1825	Unanimous Brotherly	11,202	3,042	17	12½
1836	Temperance United Brotherly	9,561	1,898	17¾	12½
1835	United Brotherly	8,000	1,237	17¾	12½
1820	Peaceable Friendly	6,807	1,043	16	12½
1854	Victoria Burial.....	3,492	906	19½	15
1848	Humane Family Friendly	2,317	495	20	—
1853	Legal Burial	2,300	86	18½	—
Totals		92,269	£19,313		

The Commissioners thus speak of the extraordinary development of F. Sos. in Preston:

439. But the Regis. Returns for 1872 give an add. for the above-named Sos. of 479, numbers of £3177 funds; and if we add to the list the three large Sos. already referred to from the Regis. Return for 1871 and 1872—the *Operative F., United Catholic, and Independent Odd Fellows' Family*, viz. 4328, 4707, and 2022 members respectively—we shall have a total of 108,120 members of Burial Sos. in a town, as Mr. Stanley observes, with about 80,000 pop., and its neighbourhood. There must therefore be a large amount of re-insurance [double or triple ins. ?], which, he says, the Sos. take as efficient steps to stop. But it is clear that, allowing for the agencies of general Collecting Sos. nearly the whole pop. of Preston must, practically, be connected with Burial Sos. of some kind or other.

3. The Macclesfield district of Burial Sos.:

Date of Estab.	Name of Society.	No. of Members.	Funds.	Cost of Man.	Cost of Collection.
1831	No. 1 Burial	6,800	£ 765	p.c. 12½	p.c. 5½
1831	Macclesfield Gen.	6,600	477	11½	7
1833	Macclesfield, Sutton, & Hurdsfield	6,000	1,146	13	8½
1844	Ivy and Oak Gen.	2,725	484	14	7½
1838	Sutton, Macclesfield, & Hurdsfield	1,039	214	25	13
1848	Sutton No. 1 Gen. Independent	1,140	201	19	11
1847	No. 5 United Friendly	800	126	—	14
1844	Independent Burial	196	17	28½	14½
1841	Macclesfield Sunday School	2,000	426	22	12
1845	Independent (A. Free Gardeners)	431	230	23	15½
	Totals.....	27,731	£4,186		

Of this group of 10 Sos. 7 are regis. The pop. of the town is 40,000. An "Amalg. Asso. of Burial Sos." had been formed, to watch the carrying out of the provision of the F. Sos. Act limiting the amount to be paid on the death of a child. [INFANT MORT.] Medical aid is granted by all the regis. Sos. in cases of sickness.

It is the characteristic of some of the Macclesfield Sos., as well as of some of the best of the Local Collecting Sos. in other places, that the collectors are sent out in pairs—the "Book Collector" and "Bag Collector" (*vulgo* "Bookman" and "Bagman"); the one being a check upon the other. The Commissioners say:

443. The Burial Sos. of the 4 Northern Counties of Eng. offer some peculiarities. In the Glendale Union, Northumberland, amidst a scattered pop. of 13,211, Mr. Culley found 4 Burial Sos.—2 regis., with 373 members, and £600, and 2 unregis., with 441 members, and £96; 3 of the 4 being now over 45 years old. He observes: "The rules of these County Burial Sos. are very interesting: amongst other things showing the probable origin of the Collecting system, by laying on the stewards the duty of collecting."

444. In the Chester-le-Street Union there is a curious development of Burial Sos. for women alone, termed "Life boxes," of which Mr. Culley reckons 10, besides it would seem 1 yearly one. These we will revert to in speaking of Female Sos.

Some details are given of Local Collecting Sick and Burial Sos. in the Manchester District, almost peculiar (so far as Eng. is concerned) to E. Lanc. "These appear gen. to be worse conducted than the pure Burial Sos., and tend to merge into the latter class."

In Wales, Mr. Daniell found small Local Burial Sos. "of rare occurrence."

Scotland (say the Commissioners) supplies, on a much smaller scale, a curious parallel to England as respects Burial Sos., and the practice of collecting from door to door. "Local Burial Sos. appear to be scattered, though sparsely, all over the kingdom; but apart from the General Burial Sos., Ayrshire seems to be for Scot. what Lancashire is for Eng.—the special domain of the collecting form of So." Mr. Culley, speaking of the Ayr District, as well as of the town of Girvan, which lies to the south of it, says (p. 35):

All the Sos. in this district, as well as in the town of Girvan, employ collectors, whom they call *officers*, to "uplift" the contributions; and the payment of these officers or collectors (one for each So.) is the chief item of man. expenses. There is a fashion in these things, as in many others; and the promoters of the Ayrshire Sos. are persuaded that they could not get on without collectors."

The following T. shows, however, that these Sos. are conducted with economy:

Date of Estab.	Name of Society.	No. of Members.	Funds.	Cost of Man. p.c.	Cost of Collection. p.c.
1824	Self-supporting	600	£ 2798	£ s. d. 39 0 0	£ s. d. 24 0 0
1820	Hand-in-Hand Juvenile	134	160	10 10 0	6 10 0
1845	Humane Friendly	147	590	8 0 0	5 0 0
1833	Reform Friendly	374	663	23 0 0	16 0 0
1830	Protector	200	350	12 0 0	8 0 0
	Totals.....	1455	£4558	92 10 0	59 10 0

This gives for the 5 Sos. an average cost for management of about $10\frac{1}{2}$ p.c. on contributions, or $11\frac{1}{2}$ on expenditure; and for collection, of about 7 and $7\frac{1}{2}$ p.c. on these items respectively. The 3 last-named Sos. in the T. are unregis.

There are 2 other regis. Sos. in *Scotland* of a peculiar type—intermediate between the purely Local and the General. They are both offshoots from the *Scottish Legal*, to be noticed under the next head. 1. The *Stirlingshire Friendly Assn. So.*, founded 1861, wherein the collectors are allowed 25 p.c. commission. 2. The *Aberdeen and Northern Counties F.*, founded 1862, which is confined to Aberdeen and 6 miles round. This latter had in 1872 (?) 9804 members, with funds in hand of £3157 12s. 6d.; and it allows its collectors 20 p.c. for collecting. The amount of lapse is “perhaps about 7 p.c. or less.”

In *Ireland* the Local Burial Sos. have not taken any prominence. Mr. Daniell says of them: “The smaller mut. Burial Sos. are almost identical in their organization and method of working with the Tontine Sos. [Dividing F. Sos]. The members are compelled, under penalty, to serve in rotation on the Committee. Their surplus is divided at the end of the year; and in order to secure a surplus, they pay contributions high enough to provide against all contingencies.” There are in Dublin a certain number of Local Sos. employing collectors; “and which seem (say the Commissioners) to have all the defects of the large General Collecting Sos.” As an instance, the *Dublin Andean Burial*, founded 1857, and numbering 4262 members, is quoted; “the mismanagement of which entitles it to a place not very far behind the most notorious of its larger English brethren;” and instances are given in support of this view. In addition to the *Andean*, there are the following Burial Sos. in Dublin:

Date of Estab.	Name of Society.	No. of Members.	Funds.	Proportion of Man. Expenses to Income.
1859	St. Columbanus Friendly Christian	1,304	£ —	$\frac{1}{15}$
1861	St. Vincent's	1,407	12 0 0	$\frac{1}{13}$
1862	St. Anne's Donnybrook Christian B.	1,373	9 16 3	$\frac{1}{11}$
1863	St. Augustine and Monica	1,080	—	$\frac{1}{11}$
1866	Flower of Dublin	1,100	92 4 7	$\frac{1}{8}$

There appear to have been at that date more than 44 Burial Sos. in *Ireland*, with a collective membership of 18,969—the above-named 6 being those with more than 1000 members. Of these, 26 are “Dividing Sos.”; 7 are not; and the remaining 7 do not state whether they are or are not. “But the absence of division does not seem always to uphold the funds in hand”—thus the *Flowery Land Mort. So.*, a Dividing So. estab. in 1864, had £20 in hand for 700 members; while the non-dividing So., *St. Mary and St. Peter's Benevolent Burial*, estab. in 1851, had £30 17s. 7d. to 330 members! 14 of the above Sos. employed collectors.

Returning to E. and W., the Commissioners endeavour to make a complete estimate of the number of Local Burial Sos. in operation; and their summary is as follows:

No. of Societies.	Name or Description.	Members.	Funds.
1	Infants Funeral Friendly	2,138	£181
1	Blackburn Philanthropic Burial	130,370	18,725
1	Chorley Family Funeral	23,005	649
1	Burslem Mutual	33,762	17,436
13	Group of Sos. with over 1000 members mentioned by Mr. Stanley (in 1872)	97,289	25,247
32	Group of ditto from Registrar's Rep. 1872	87,890	21,971
6	Group of ditto from Registrar's Rep. 1861	23,101	4,389
15	Group of Regis. Sos. in and near <i>Manchester</i> (Mr. Stanley), with additions	99,885	33,930
9	Group of Regis. <i>Preston</i> Sos., ditto	97,063	22,490
8	Group of <i>Macclesfield</i> Sos., ditto	22,868	3,471
1	<i>Birmingham United Legal</i>	7,500	6,656
107	Sos. under 1000 members, returning members (3 not returning funds), from Regis. Rep. 1872	26,974	23,616
195		651,845	£178,761
44	Sos. not returning members, from Regis. Rep. 1872	—	25,016
239			£203,777

But it is added: “In order to obtain the number of members for the Sos. which do not return it, we may suppose (and this would seem to be the least favourable view which

can be taken) that some of them exceed 1000, and that the proportion of funds to members is the same as that of the 107 Sos. of this class which return members—or 17s. 6d. p. head. This would give an add. of 28,500 members—making the total 680,435. But there remains to estimate the number of Sos. making no return at all. *These are about half the total number, reckoning all kinds of Sos. together.* Let us reckon them at 150 in all, or about five-eighths of the returning Sos., and average them at the figure of the group of 107 before selected. This will make 37,814 add. members, or a grand total—in all prob. understated—of 718,249." (p. ci.) But some deduction has to be made for double membership.

II. *General Collecting Burial Sos.*—These differ from those of the previous class mainly in the fact of extending their operations over the entire kingdom. Several of these—like several of the Local Sos.—have also Sick branches. "But these (say the Commissioners) are prob. always either mere shadows or mere blinds." The *Swansea Royal and South Wales F.* is named as an exception. "The impossibility of carrying on sick bus. for a Burial So. of extensive area is admitted by irrefragable evidence." One reason for this undoubtedly is the general dissimilarity of operations. There are far more members who join Burial Sos. with all their family—"who especially desire to insure the funeral expenses of their children"—than is or can be the case in F. Sos.—the latter being mainly composed of adult males. The *Royal Liver* tried the experiment, but have (since 1863) practically abandoned it. The *Victoria* (of Lond.) also tried it, on a much smaller scale, but abandoned it. The *Royal London* is even a more recent instance. It is the belief of many practical men that sickness operations can only be successfully worked over a local, or limited, area.

It is not a little remarkable that, while the largest group of Local Burial Sos. is found in Manchester, the largest, "and at the same time the Parent group" of General Burial Sos. have their head-quarters in *Liverpool*. The next largest group—entirely composed of offshoots from the former, immediate or mediate—is at *Glasgow*. Other smaller groups are to be found in *London, Manchester, Belfast*; detached Sos. in many English manufacturing towns, and one in South Wales, already spoken of. The following was regarded as a complete list of the principal of these, at the date of the Report.

Table of the Principal General Burial Sos. of the United Kingdom.

Date of Estab.	Name of Society.	Head Quarters.	Area of Operations.	Year to which the figures relate.	Members.	Funds. £
1850	Royal Liver [1850]	Liverpool	U. K.	1871	550,000	264,795
1843	L'pool Victoria Legal	Ditto	U. K.	1872	200,000	49,159
1852	Scottish Legal	Glasgow	Scot. & Ire	1872	216,343	54,982
1832	United Assu. (St. Patrick's)	Liverpool	Eng. & Ire.	1871	140,000	15,311
1840	United Legal (Royal Oak)	Ditto	England	1871	50,000	12,370
1844	Loyal Philanthropic	Ditto	England	1872	45,800	18,373
1856	Liverpool Protective	Ditto	England	1872	48,132	16,978
1858	Integrity Life Assu. and Sick Benefit	Lond.	Eng. & Ire.	1870	42,000	2,675
1861	Royal London	Lond.	Eng. & Ire.	1871	25,000	4,964
1862	City of Glasgow	Glasgow	Scot. & Ire.	1872	24,000	7,571
1847	St. Anne's Catholic	Liverpool	(Liverpool, Warrington, Chester)	1872	20,000	1,477
1868	Swansea Royal and S. Wales Union	Swansea	S. Wales	—	17,600	429
1870	United Reform	Glasgow	Scotland	1872	10,000	751
1859	People's Life Assu. and Sick Benefit	Dudley	—	1872	11,474	7,011
1863	United Family Life Assu. and Sick Ben.	Birmingham	(Birmingham, Derby, etc.)	1872	8,550	1,002
1869	Loyal Irish Legal	Belfast	Ireland	1872	8,298	7
1865	Birmingham & Midland Counties St. Patrick's	Birmingham	—	1872	4,500	1,690
1861	Star Benefit	Leicester	(Leicester, Derby, Loughboro')	1872	2,156	1,810
1870	Lanc. & Cheshire Assu.	Manchester	—	1872	1,140	34
1859	St. Oswald's	Liverpool	—	1872	1,080	216
Totals					1,426,073	461,605

[We have included in this T. all the Sos. mentioned in the Rep. of the Commissioners, and in the order there given (with the explanatory notes); but why the *People's* of Dudley and the later ones were included does not appear clear—they all, with the exception of the *Loyal Irish*, appear Local.]

The Commissioners add, that besides these, there were smaller Sos., such as the *Union Friendly* of Manchester, the *Ulster Mutual* of Belfast, the *Christian Mut.* of Halifax, etc., etc., "which would prob. make up the total to more than 1,450,000 members." But these figures apply to the whole of the U. K. To obtain those for E. and W. only, the following deductions would have to be made:

<i>Scotland:</i>		Members.	<i>Ireland:</i>		Members.
Scottish Legal	.....	216,343	United Assu.	.....	26,000
Royal Liver	.....	105,000	Royal Liver	.....	7,000
City of Glasgow	.....	24,000	Loyal Irish Legal	.....	8,298
United Reform	.....	10,000	Victoria Legal, say	.....	3,000
Victoria Legal	.....	3,000			
Other Sos., say	.....	3,000			
Total	.....	361,343	Total	.....	44,298

This would leave in round numbers about 1,000,000 members—"an extent of membership second only to that of the Affiliated Orders, and nearly equivalent to it." But further deductions have to be made on the score of "duplicate membership." The Coroner for Liverpool drew from the experience of his office the inference "that it is a very common thing for persons to be insured in several clubs." Other witnesses admitted the practice, pleading the smallness of sums frequently insured in each So., as 30s.; so that at this rate they would require to enter 4 Sos. to make up the legal limit of £6. In Scotland it was stated the practice was not very general. The Commissioners thought that, taking into account the practice as between Local and General Sos., or between General Sos. only, "15 p.c. is prob. the lowest deduction which could be made on this head." But, in add. to this, "a proportion of the adult members, and prob. in particular most of the officers of General Burial Sos., are also members of Affiliated or other Sos." At this point, too, it is well to state—what indeed is obvious enough—that all the ordinary F. Sos. include among their benefits the payment of a sum at death, and most of them also on the death of members' wives.

Burial Sos. may be said to owe, not their origin—for therein is involved a great history, which will be dealt with under FUNERALS—but their separate and special existence to the fact that ordinary F. Sos. do not, and cannot (for an unknown quantity is involved), extend their Funeral allowance to the individual members of the entire family. In this view especially the question of the extent of *Infant Membership* in these Sos. becomes one of great interest. There are, too, other points of interest involved, which will be discussed in some detail under INFANT MORT. To show the considerations which arise, even in estimating the numbers, we quote the following from the Rep.:

473. If we attempt to determine, as in respect of the Local Sos., how many of these members are children only, we find again that no sufficient data appear to exist for arriving at a satisfactory conclusion. According to returns put in by Mr. Sprague, the actuary, the number of children entered in the London district of the *Royal Liver* in the first year of their age amounts to 11'12 p.c. of the total entries, and the total number entered within the first 5 years of life to 24'91, or nearly one-quarter of the whole; whilst if we reckon all under 15, we should find they amount to 42'08 of the entries. *But this does not indicate the total number of existing infant members: the less so, as the mort. amongst children is admitted to be high.* There is reason to suppose that the proportion in the *Royal Liver*, and especially in the London district, falls considerably short of what it is in Liverpool, and amongst Sos. of a lower type. The strong opposition which was offered to Lord Lichfield's F. Sos. Bill in 1868 was avowedly on the ground that it prohibited the ins. of children under 10. "Many amongst the working classes," said the Sub-Treasurer of the *Royal Oak*, "will enter their children directly they are born, and then they will get themselves entered in the course of 12 months. In fact, that is what keeps the estab. going. The more children that are born, and the more that get into the club, the better for us." Prob. if we estimated the number of members under 15—i.e., an age lower by 3 years than the minimum age usually required for admission to an Affiliated Order—at from 30 to 40 p.c. of the gross total, we should be well under the mark.

They add: "Deducting also for double membership, the total number of persons members of General Burial Sos. alone, who have passed the age of puberty, cannot well exceed from 550,000 to 650,000—or about half the membership of the Affiliated Sos."

The Commissioners proceed to review the organization of the Burial Sos. of this class, "taken under their most highly developed forms;" and here we shall make no attempt to follow the Rep., but be content with a passage or two indicating the results arrived at. Thus:

475. The staff of a large Burial So. consists properly of two classes of officers, the General Staff and the Local: the former again dividing itself between the Committee (sometimes called Directors) and the permanent officers; the latter between the Collectors (otherwise called "Agents" or "Officers") who overlook them; and the trial of strength is always between the Local and the General Staff—which shall get the upper hand. Substantially, for reasons which shall be presently noticed, the victory always remains in the first instance with the Local Staff; but the men who thus climb to power are often those who succeed best in curtailing the influence of the class to which they owe it.

487. Virtually then, the gov. of the large General Burial Sos. is almost always directly, or indirectly, in the hands of actual or former Collectors, and must therefore be carried on in the collector spirit. What that spirit is likely to be, we have now to examine on consideration of the collecting system itself.

488. However the nomenclature of the officers employed may vary, every large So. of the kind must be geographically divided into Districts, and these again into Collections: the difference in this respect between the Local and the General Collecting Burial Sos. lying, with scarcely an exception, precisely in this—that whilst in the former the Collectors can be directly overlooked from, and are directly responsible to, head-quarters, in the latter an intermediate officer has become necessary, at least in country districts. This intermediate officer, whom we will call *Agent*, as being the term in use by the *Royal Liver* and the *Scottish Legal*, i.e. the two largest Sos. in Eng. and Scot. respectively, as well as in several minor ones, has been, and generally, if not always remains still, a Collector himself. His duties in the *Royal Liver*, for instance, are to superintend the Collectors generally; to receive from them weekly lists of applicants for membership, and weekly accounts; to investigate complaints against Collectors, and suspicious cases generally; to procure distribution within his district of notices of meetings, and other notices for members; and to send in his own accounts fortnightly to the Board. . . . Besides the Resident Agents, there are also "Travelling Agents," who are employed in local inspection where it is suspected that anything may be going wrong.

489. We now come to the Collector, the pivot of the whole system. In both the General and the Local Burial Sos. the Collectors are generally drawn from the working class—but with this great difference, that in the latter the Collector is very frequently, if not habitually, an actual working man, who undertakes the office as a mere supplement to his usual source of income, and collects in his evenings, his Saturday afternoons or Sundays, or at most during certain days in the week. This practice is at least exceptional in the General Sos. . . . As a rule then, *it is their whole time which these men give in such Sos. to the work of collection, and they require of course a higher remuneration.* The qualities such men require, according to the evidence of a Liverpool surgeon of considerable experience in these Sos., are those of "a shopkeeper or a goods salesman: the one sells ins. cards and the other sells clothes, or anything else." . . .

The mode of payment to the ordinary collector is by a commission on the amount of his books, i.e. of his collections. Sometimes a collector sells his "books"; at other times they collect by deputy. Sometimes, too, canvassers are employed, specially in view of obtaining new members.

Advancing a stage in the working, we learn much of the circumstances under which individual policies lapse, and also much with respect to wholesale lapsing, under circumstances too frequently not very creditable to the Sos. Sometimes the agent is in fault, as he is said to gain more by getting a new member than by looking after the old ones. The working of this part of the system as it affects the Sos. is thus graphically told in the Rep.:

503. There are in fact often two chances to one against the member, when seeking to obtain the benefit of his ins. *The Collector and the So. may be alike interested in getting rid of him.* No doubt what is called in ordinary F. Sos. *secession*—in Burial Sos. more generally *lapse*—is a source of profit to all Sos., at least where no surrender value is allowed, or credit is not given for prems. paid. *But the General Burial Sos. in many cases absolutely maintain themselves by their lapses.* Mr. Atherton returns the lapses in the *Royal Liver* at 13 p.c. p.a.—giving an average duration of some 8 years p. member, exclusively of deaths. . . . Mr. Smyth, late of the *United Assurance*, believes that those lapses which occur "through no default of the officers of the So." amount to about 25 p.c., besides those which, to use his expression, are "helped" by official management. But the most remarkable evidence on the subject was given by the officers of the two large London Sos. before mentioned—the *Royal London F.*, and the *Integrity*. "I always calculate," said the Sec. to the former (at one time . . . in the employ of the *Royal Liver*), "that at least two-thirds of the people who become insured in our office, and in similar inst., allow their pol. to lapse, and consequently deprive themselves of benefit." "I believe," he says further on, "that it is possible for a life office not doing any sick or endowment bus. to carry on its bus. without any accumulated fund, considering the lapses."

504. The Sec. of the *Integrity* went further still. Asked how many pol. lapsed in the course of the year, he replied: "I should think two-thirds, or three-fourths of them." He estimated at "about 1 in 8," the number of insurers who continued to the end of life. In many cases members were induced to join "against their will" by the collectors. "In many cases the husband is entered by the wife without his knowledge, and in many cases the wife is entered by the husband without her knowledge; and they remove and nothing more comes of it." And he added with commendable frankness: "It is a source of profit to the collectors, and more so to the So. If it were not for the lapses, considering the heavy expenses which Sos. are at, they could not do; the lapses of course are a considerable source of profit." "I consider," he said elsewhere, "that an Industrial (i.e. Burial) So. can carry on for an indefinite time with 3 months' income. The bus. so rapidly changes that the amount in hand required to meet liabilities is very small."

But against this very frank testimony there was some by equally experienced men, which is summed up in a footnote (on p. cxv) as follows:

The Sec. of the *Blackburn Philanthropic Burial So.*, on being asked whether the secessions amounted to one-tenth or one-twentieth of the members, replied: "I should say that very few indeed secede from the So."—"Do you mean to say that, as a rule, persons who have once began to pay into your So. go on doing so as long as they live?"—"Yes." Treasurer of the *Chorley Family Funeral*: "Can you tell us what amount you collect annually from persons who secede from the So., and get no ultimate benefit?"—"They are very few." The *Salford Family Funeral*, out of 16,000 members, loses about 500 p.a., or little over 3 p.c.; the *Hulme Philanthropic*, with 2400 members, is considered never to have benefited £10 a year by secessions; in the *Hulme Good Intent*, though the secessions are considered to be very numerous, the benefit derived from them does not amount to 10 p.c. of the receipts. The *George and Dragon F.* "never" has losses of members, as the Sec. "always keeps them in benefit as long as he knows anything about them;" in the *Mortality Assn. Burial*, where secession is also deemed considerable, it amounts to about 20 p.a. out of 548—or less than 4 p.c.; in the *South Manchester Burial*, where it is "very considerable," it is not quite 42, etc., etc.

Rule 57 of the *Royal Liver* bears upon the question of lapses, and is as follows: "Should the collector neglect to call for any member's subs. in accordance with Rule 21 [which requires him to call at least once a fortnight], such member is to report the same at the head office of the So., or to the agent for such member's district. *The member*

neglecting to give this notice will be responsible for all defaults that may arise in consequence thereof."

The next point of moment spoken of by the Commissioners bears upon the present "facilities for getting up new Sos., or sham ones"; and hereon they remark:

534. Competition between Burial Sos. is greatly stimulated by the facilities which the practice of *transferring* offers for the formation of new Sos. A discontented collector or officer, still more a couple, are quite enough to found a new office. Mr. John Lawrence, seceding from the *Loyal Philanthropic*, with some 1000 members out of the 1400 or 1500 on his collecting book, founded the *Royal Liver*. Mr. James Steel, one of the men for Scotland of the *Royal Liver*, seceded and formed the *Scottish Legal* (at first the *Legal Liver Burial and Loan So.*), and again seceded from this to form the *British Legal Co.* Mr. John Stewart, a collector of the *Royal Liver*, seceded and formed the *City of Glasgow So.*, etc., etc. Indeed, the cost of estab. such Sos. is so slight—the rules being certified gratis, and the whole stock-in-trade required, consisting, it may be said, beyond a few copies of these, of prospectuses, pens, ink, and contribution cards—that some persons seem to make their living by getting Sos. up and selling them: as will be seen by Mr. Stanley's account of Mr. Davis, of Manchester, and Mr. Tidswell, of Halifax. In other cases *sham Sos.* have been set up, which existed only in the collectors' books: of which Wellman's case in Manchester is a notorious instance; and there seems reason to think that the practice still continues, although "perhaps not so much now as in former days."

The Commissioners' summing up has the combined merit of terseness and plain speaking: "539. *On the whole our opinion is decidedly adverse to this form of So.*"

III. *The Burial (or Industrial Assu.) Cos.*—No one who has reflected upon F. Sos. on the one hand, and Life Ins. Asso. on the other, can fail to have observed that the Burial So. is the connecting link between them. The primary object of a F. So. is its sick allowance—temporary during temporary indisposition; permanent (theoretically) in the shape of superannuation allowance. This was going one step beyond the early Gilds; but the leading feature of these latter—that of providing decent Christian burial—was also embodied. The *Industrial Ins. Asso.* aimed at bringing down the advantages of Life Ins. within the reach of the industrial classes—hence their designation. But in this they could only hope to reach the more provident of these classes: those who desired to leave to their widows and families something beyond the necessary meagre death payment obtained from F. Sos. The monthly payment of prem. was especially devised to this end. Still there was a void existing between the two classes of Asso.—the *descensus Avernii*—which the original promoters of Burial Sos. (under the plea stated in the preceding section) set themselves to bridge over; but into which they very soon fell. The *Industrial Ins. Asso.*, instead of standing aloof, and pursuing their orig. programme in its integrity, were too readily tempted into competition: and hence they, too, fell into the evil repute, from which it has taken an entire generation to escape. The escape, too,—for such we now regard it,—is due almost entirely to one far-seeing, upright, and most able man—Mr. Henry Harben, now, and for many years past, the leading spirit of the *Prudential*.

We do not intend to pursue the subject here. It falls to be dealt with in detail under INDUSTRIAL INS. In touching upon the subject at this point, we are only following the Rep. of the F. Sos. Commissioners, who say hereon:

548. The limits of our inquiry do not extend beyond Sos. estab. under the F. Sos. Acts; but in pursuing it we have found ourselves constantly in presence of the fact that a bus. almost, or even precisely, similar to that of Burial Sos. estab. under the F. Sos. Acts *was carried on by a class of bodies regis. under the Cos. Acts*; that the keenest competitions often existed between the two classes of bodies; that the same methods were followed; the same complaints urged by individuals against both. And we had to ask ourselves whether, being authorized by our Commission to suggest improvements in the law as to F. Sos., we could do so with effect in respect to Burial Sos. without some examination of those other bodies working, sometimes with apparent success, under a different law. At the same time we have not felt ourselves justified in carrying this examination beyond a point which would enable us to verify the fact of such success, and the conditions under which it has been obtained. Hence, of 9 existing or dissolved Burial or Industrial Assu. Cos. referred to in evidence (the *British Industry, British Legal, Empire, Friend-in-Need, Industrial and Gen., London and Manchester Industrial Assu., Prudential Safety, and Scottish Industrial*), the largest of all, the *Prudential*, is the only one which we have selected for direct examination.

And here we leave this branch of the subject, remarking that the Commissioners arrived at the conclusion that the law relating to Burial Sos. and to Industrial Ins. Asso. should be assimilated—a view in which we cordially join. [INDUSTRIAL INS. ASSO.] [LEGISLATION FOR INS. ASSO.] [LIFE INS.] [PRUDENTIAL.]

IV. *The Bearing of Burial Benefits on Infant Mort.*—This question, which no doubt has long had too intimate an association in the minds of well-informed persons to justify the Commissioners in disregarding it during their inquiry, is reviewed in the Rep. with much moderation. We shall deal with it under INFANT MORT.

By way of completing this division of the subject, and as supplemental to the preceding, we have compiled from the Rep. of the Gen. Regis. of F. Sos. pub. in 1876, the following T. of the Regis. Burial Sos. included in that Rep., and existing in various parts of E. and W. at the close of 1875; with a statement of the number of members and the funds then in hand. Some of these are included in the T. we have already quoted; but they prob. answer more nearly to the group of 107 Sos. taken from the Registrar's Rep. 1872, and included in the T. on p. 569, except that we have not here made any limitation in regard to the number of members existing in the Sos.

Table of the Registered Burial Sos. in E. and W. making Returns to the Registrar of F. Sos. for the Year 1875:

When Etab.	Name of Society and Location.	Year to which the figures refer.	No. of Members.	Amount of Funds.
1774	Friendly Burial (Shoreditch, London)	1875	212	£ 926
1810	Old Orig. Burial So. (Salford)	"	3472	12
1814	Lately Common and Culcheth Burial (Lanc.)	"	1351	293
1818	Gortonian Children's Burial So. (Gorton, Lanc.)	"	772	159
"	New United F. Burial (Manchester)	"	16,586	3627
1824	Milfield Funeral (Northumberland)	"	247	522
1825	Longsight F. Burial (Manchester)	"	801	894
1826	Birtenshaw School Burial (Lanc.)	"	4571	53
1828	Children's Burial (Warrington)	"	2704	260
1830	Benevolent Burial (Uppermill, Yorks)	"	6853	1103
"	Earl of Oxford Family Burial (Manchester)	"	1226	1109
"	Royal Victoria F. Burial (Stalybridge)	"	1555	99
1832	Dalston Funeral F. So. (Cumberland)	"	529	659
1833	Hulme F. Burial (Manchester)	"	8643	6051
"	Macclesfield, Hurdfield, and Sutton No. 2 Burial (Cheshire)	"	6585	—
1835	Burial So. (Prescot, Lanc.)	"	483	1540
1836	Children's Burial So. (St. Helen's)	"	206	411
"	Philanthropic Burial (St. Helen's)	"	3039	684
1839	Blackburn Philanthropic Burial	"	111,665	16,224
"	Coventry Benevolent	"	14,729	8278
1840	Leek Benevolent	"	7468	552
"	Liverpool United Legal F. Burial	"	—	—
1841	Burslem Mut.	"	40,867	25,748
"	Chester and Dunham-o'-the-Hill District A.O.F. Funeral Fund	"	1837	1818
"	Lancaster Benevolent Burial So.	"	—	—
1842	Good Intent Burial (Kingston-on-Hull)	"	2850	1671
"	Hulme Philanthropic F. Burial (Manchester)	"	2979	2111
"	Levenshulme Burial So. (Lanc.)	"	653	50
1844	Coventry Church General Burial	"	9790	4328
"	St. John's Burial So. (Manchester)	"	8600	1856
1845	Family Burial So. (Manchester)	"	5736	3048
1846	Birmingham United Legal F.	"	8081	8458
1847	Good Design F. Burial (Kingston-on-Hull)	"	3407	1910
"	Nottingham and Kensington Gen. Burial	"	97	367
"	St. Anne's Assu. F. So. (Liverpool)	"	17,934	1858
"	Second Temperance Burial (Manchester)	"	6204	1251
1848	Carlisle Funeral F. So.	"	1896	1450
"	Preston Humane F. Funeral	"	2443	430
1849	United Assu. So. (Liverpool)	"	159,957	31,218
1850	Royal Liver F. So. (Liverpool)	"	682,371	453,418
"	Stonehouse United Funeral (Devon)	"	564	1227
1851	Dunkinfield Old Chapel Sunday School Burial So. (Cheshire)	"	155	134
"	F. So. (Loddon, Norwich)	"	32	199
1852	Castle Rising Burial (Norfolk)	"	240	100
"	Clarence Dock Labourers F. Burial	"	325	27
1855	Bury St. Edmunds Funeral	"	541	254
"	Preston United Brotherly Legal Burial	"	9327	1194
"	Woodside Burial (Horsford, Yorks)	"	1133	105
1856	Brisley Benefit (Norfolk)	"	271	10
"	Downham Market Burial (Norfolk)	"	218	25
"	Liverpool Protective Burial	"	54,065	26,045
"	Loyal Inkerman Burial (Prescot)	"	124	315
"	Shrewsbury District Funeral Fund	"	367	357
1857	Liverpool Pensioners F. Burial	"	—	—
"	Shipham Union	"	248	21
1858	Philanthropic (Hyde, Cheshire)	"	10,384	4441
"	United Charitable Burial (Pemberton, Lanc.)	"	282	436
1859	St. Oswald's Catholic Burial (Old Swan, Lanc.)	"	1084	303
1860	Gringley Imperial (Gringley-on-the-Hill, Notts)	"	101	69
1861	Liverpool Licensed Porters F. Burial	"	37	30

When Estab.	Name of Society and Location.	Year to which the figures refer	No. of Members.	Amount of Funds.
1861	Royal London (Barbican)	1875	94,103	£ 15,828
1862	Beal Funeral (Northumberland)	"	201	82
"	Customs' Boatmen's Burial	"	—	—
"	Duke of Devonshire Family Burial (Salford)	"	1610	604
"	Funeral So. (Attleborough, Norfolk)	"	327	23
"	Mortuary Gild of St. Mary's (Halifax)	"	83	156
"	Sandbach District F. Fund	"	204	2774
"	Wigan Local	"	335	196
1863	Bedford Leigh F. Burial	"	5901	2688
"	Death So. (Sedgley)	"	129	19
"	Rochdale District Burial and Sick	"	1256	169
1864	Fenton United Burial (Staffordshire)	"	683	458
1865	Lancastrian F. Burial (Openshaw, Lanc.)	"	—	—
1866	Cheadle and Churnet Valley District (Staffordshire)	"	259	40
"	Keighley Labourers Friend Accident Burial (Yorks)	"	39	175
"	Liverpool South End Dock Labourers F. Burial So.	"	—	—
"	Mut. Burial (Clay-next-the-Sea, Norfolk)	"	345	53
"	United Legal Burial (Leeds)	"	915	437
1867	Over Darwin Burial So.	"	5820	1010
1868	Levenshulme F. Burial (Lanc.)	"	1015	110
1869	Benevolent Prov. Burial So. (Hindley, Wigan)	"	1678	337
1872	Prov. Funeral (Great Yarmouth)	"	27	10
1873	St. Andrew's Temperance (St. Martins, Lanc.)	"	132	31
1874	Ivy and Oak Burial (Macclesfield)	"	3024	780
"	Printers and Transferrers (Hanley)	"	243	32
"	So. for Providing the Funeral Expenses on Death of Children (Manchester)	"	—	—

See *Sos. of Females*; *Unregistered F. Sos.*

10. Annuity Sos.—Towards the close of the last, and during the first half of the present century, it was very much the practice to found Local Annuity Sos., which were a modification, as also a simplification, of the Widows' Funds of an earlier period. This movement, we suspect, arose in part out of the repeated attempts made to induce Parl. to devise or adopt a system of *Parochial Annuity Asso.*, in view of mitigating the severe pressure then occasioned by the Poor Laws. Several of these attempts have been reviewed in the early historical portion of the present art. on F. Sos.; others will be noticed under POOR, INS. SCHEMES FOR THE. Many, if not most, of these Local Sos. became regis. under the F. Sos. Acts, as the easiest mode by which they could obtain any legal protection.

In the Return presented to Parl. in 1852, and of which we have given a detailed account under that date, the Annuity Sos. were separately classed; and from the printed abstracts we have prepared the following T., arranged in the order of counties alphabetically, and not chronologically: but the date of estab. is given in nearly all cases:

T. of Annuity Sos. existing at end of 1850 in England and Wales, and enrolled under Friendly Sos. Acts, included in the Return made to Parliament in 1852.

COUNTY.	TOWN.	Date of Estab.	No. of Members.	Ann. Income.	Accumulated Fund
CORNWALL.	Paul near Penzance	1836	356	£ 269	£ 3,448
	Truro	1790	—	—	1,000
DEVONSHIRE.	Devonport	1779	184	459	16,845
	Ditto	1823	925	3362	148,207
	Moreton Hampstead	1829	160	113	2,665
	Newton Abbot	1796	41	—	6,000
	Ditto	1820	337	—	18,489
	Sampford Courtenay	1838	263	68	618
	Plymouth	1766	69	—	—
	South Molton	1817	651	580	13,484
	Totnes	1782	29	—	10,675
GLOUCESTERSHIRE.	Ditto	1804	64	—	7,487
	Bristol	1803	13	—	10,731
	Ditto	1805	26	—	13,152
	Ditto	1832	117	531	11,684

COUNTY.	TOWN.	Date of Estab.	No. of Members.	Ann. Income.	Actuarial Value.
HAMPSHIRE.	Portsea	1813	29	47	3,307
	Ditto	1815	237	210	5,495
	Ringwood	1842	31	—	302
HEREFORDSHIRE.	Leominster	1804	74	208	4,802
KENT.	Chatham	1815	52	104	4,334
	Maidstone	—	32	—	9,666
LANCASHIRE.	Manchester	1823	357	597	9,326
LONDON, CITY OF	Coal Exchange	1838	170	300	11,445
	Moorgate	1840	2040	12,593	39,407
	Wood Street, Cheapside	1841	122	223	3,421
	Fleet Street	1842	101	300	1,555
MIDDLESEX.	Bethnal Green	1822	—	—	997
	Gt. Queen Street	1832	—	—	38
	English Opera House	1839	103	378	5,903
	Old Cavendish Street	1842	45	31	1,105
	Gt. Queen Street	1842	104	—	724
	Chancery Lane	1845	258	112	856
	Ditto	—	158	—	993
	Sackville Street	—	373	—	—
	Vere Street	—	63	57	766
NORFOLK.	Fakenham	1795	527	414	15,692
NORTHUMBERLAND.	Newcastle-on-Tyne	1774	44	—	2,766
SHROPSHIRE.	Shrewsbury	1841	57	—	1,486
SURREY.	Epsom	1813	25	—	5,027
YORKSHIRE.	Kingston-upon-Hull	1830	183	23	1,305

Turning now to the Rep. of the Commissioners under this head, it is stated "that, by the testimony of the Registrar's office, very few Sos. granting annu. of any kind are now regis.: the reason mainly assigned for the fact being [1] the requirement of the actuarial certificate, and [2] the competition of the Post Office." They add:

There is, however, a compact group of Annu. Sos. proper in the *West of Eng.*, since the Registrar's Rep. for 1872 enumerates, in *Devon*, 10, with £223,360 funds, and 1363 members. The only other body returned as a So. for granting annu. is the *Nottingham and Nottinghamshire Annu. So.*, with £764 funds, and 865 members. This would bring the total of funds for 11 Sos. to £224,144; and the total membership to 2228. Among these Sos. one must be named—the *Royal Naval Annuity So.* at Devonport, with £108,890 funds, and 133 members; the *Western Annu. So.* of Exeter, having on the other hand more than twice the number of members of any other, except the *Nottinghamshire* (whose funds are very low), and nearly 4 times the funds of any but the *Royal Naval Annuity*, viz. £55,389 to 391 members. Five other Sos. have over 100 members, but only one of these has more than £10,000 in funds.

In *Ireland* Annu. Sos.—of which the Registrar's Rep. for 1872 enumerates 12, with 832 members, and £185,322 funds: one So. returning neither—appear to submit their affairs to periodical valuation. [IRELAND.]

In *Scotland* there are many Annuity Sos. connected with the clergy and the various other professions—but these mostly take the shape of WIDOWS' FUNDS, under which head they will be spoken of in some detail. Some of them will be found enumerated under sec. *Special Trade (or Class) Sos.*, in this art.

The Commissioners offer the following general obs. on this class of Sos.:

586. The mode in which the subject of annuities is dealt with under the F. Sos. Act is somewhat peculiar. Under head 2 of the 9th sec., allowing Sos. to be estab. "for the relief or maintenance of the members, their husbands, wives, children, brothers or sisters, nephews or nieces, in old age, sickness, or widowhood," it is clear that an annu. would be a legitimate form of maintenance; but of the 3 cases in which it may be lawfully granted, two only—sickness and widowhood—may be considered as in some measure self-defined. The third, old age, is nowhere interpreted in the Acts, and its meaning can only be fixed by judicial decision; nor are we aware of any on the subject. The section goes on to provide "That no member shall subscribe or contract for an annu. exceeding £30 p.a."; and a further sec. limits this as the sum receivable by any one member from several Sos. collectively. Sec. 26 provides that it shall not be lawful for the Regs. to certify "a So. assuring to any member thereof a certain annu.," or certain superannuation, deferred or immediate, "unless the T. of contributions payable for such kind of assu. have been certified by an actuary as therein defined." Lastly, sec. 46 empowers Annu. Sos. founded under previous Acts of Parl. to enjoy the exemptions and privileges of the Act, "notwithstanding that the contingent ann. payments to which the nominees of the present or future members of such asso. or Sos. may become entitled shall exceed in the aggregate the sum of £30."

589. It will be seen that the group of Annu. Sos. proper is an exceedingly small one. Mr. Tompkins suggests that it should be formed legally into a special class; but it seems doubtful whether it would

be worth while to do so. *In Eng. at least these Sos. are evidently dying out:* since the list of dissolutions by agreement contained in the Registrar's Rep. for 1872 includes no less than 5 Annuitant Sos.—4 in Devon, and 1 in Cornwall, besides a Widows' Pension So. in Kent. If, however, annuities are still to be granted under the F. Sos. Acts, the conditions of old age annu. should be defined.

We incline to the view of Mr. Tompkins that all Sos. regis. under the F. Sos. Acts, and granting annu., should be put under a special class. Much might be done to develop this class of bus.

11. Societies of Females.—Under date 1795, in the historical portion of this art., we have given some account of the *Female F. Sos.* existing at that period; but no adequate idea of the number of these Sos. existing in this country at any later period has been possible, from the want of precise statistics. In our chap. on the "Affiliated Orders," more particularly in the T. at its close, it is seen that there are various Orders of F. Sos. composed entirely of Females—as *Druids*, "United Ancient Order of Female," and "Noble Order of Female (Leigh Unity)"; also *Druidesses*, Loyal Order of; *Odd Sisters*, "Wolverhampton Reformed Order of"; *Rachabites*, "United Order of Female"; *Shepherdesses*, no less than 3 Orders of; *Sisters of Progress*, "Independent Total Abstiners"; *Temperance Daughters of*, "Grand Union of Manchester"; *United Brothers and Sisters* (Leicester Unity); and *United Sisters* "Imperial Order of Loyal." Here is quite an imposing array of "Female Orders"; but most of these are of comparatively recent origin. But among the regis. Female Sos. we find reference to other titles which prob. have not yet developed into Orders, as the *Female Foresters* (or "United Sisters of Sherwood Forest"), *Female Gardeners*, *Odd Females*, *Loyal Orangewomen*, *Loyal Women*, *Comforting Sisters*, *Alfred Sisters*, and a few others, to which reference will be made later. Turning next to the Local or Town and Village F. Sos.—in these, Females have either been entitled to membership in common with the males; or, what is more to our present purpose, have founded Sos. exclusively for themselves almost from the beginning.

The Rep. of the Royal Commissioners contains the following T., compiled from the "Registrar's Rep."—year not stated, but prob. 1872—which is of considerable interest.

T. of F. Sos. for Females existing in the Counties of E. and W. in 1872:

Counties.	No. of Sos.	Total Members.	Total Funds.	Counties.	No. of Sos.	Total Members.	Total Funds.
			£				£
Bedfordshire	5	466	1419	Northumberland	7	455	723
Buckinghamshire	2	199	877	Notts	8	810	2648
Cheshire	9	596	8741	Salop	2	113	1945
Derby	23	1810	9039	Somerset	2	233	253
Devon	11	1036	3656	Stafford	26	2284	10,037
Dorset	1	22	165	Surrey	3	306	4654
Durham	28	3141	4979	Warwick	14	542	2364
Essex	1	11	192	Worcester	7	660	2427
Gloucester	5	187	696	Yorkshire	14	655	9967
Hants	4	128	548	Cardigan	2	173	168
Hereford	2	151	224	Cardigan	2	111	235
Herts	1	27	83	Denbigh	3	77	221
Lancashire	37	3383	15,833	Flint	3	27	1844
Leicestershire	25	1689	5448	Glamorgan	10	454	1772
Lincoln	3	495	1932	Merioneth	2	178	336
Middlesex	5	244	1526	Montgomery	1	90	188
Monmouth	9	736	1283				
Norfolk	1	74	2341				
Northampton	5	1128	2652	Totals	283	22,691	101,516

Here there was shown to be Female Sos. in 35 out of the 52 counties—those not returning any being Berkshire, Cambridge, Cornwall, Cumberland, Huntingdon, Kent, Oxford, Rutland, Suffolk, Sussex, Westmorland, Wilts, Anglesea, Brecon, Carnarvon, Pembroke, and Radnor. A more recent investigation of the F. Sos. existing in each county, given under 1876, will show that in some of these counties there are Regis. Sos. for Females. The Commissioners say, "A large number of such Sos." are *unregistered*.

It has further to be stated that of the 283 Sos. in the preceding Table, only 237 returned the number of their members; and the funds of those so returning their numbers amounted to £79,053. The average number of members in these 237 Sos. was 96. The same average applied to the 46 Sos. which did not return their numbers (which subsequent investigation shows would really be too low) gives an add. of 4416 members—making in all 27,107. But this number has still to be added to as we proceed.

The counties having the largest number of Female Sos. are Lancashire, Durham, Stafford, and Leicester—each having 20 or more. The largest So. in point of numbers was one in Northampton with 714. The Sos. with over 300 members (excepting this)

were only 4—2 in Lancashire, 1 in Bedfordshire, and 1 in Lincoln. Mr. Stanley's Rep. mentions 2 Regis. Sos. in Nottinghamshire "not to be found in the Returns," viz. 1 at Stapleford with 240 members, and 1 at Ruddington with 200. While Sir George Young mentions 1 at Barton-in-the-Clay (Bedfordshire) with 200 members. It is believed that there are many Regis. Sos. of this class which make no returns. Some few may be included under other classes.

Sir Geo. Young, speaking more particularly of the Sos. of this class in the South of England, says:

In Bristol there are 3 Orders confined to Females—the *Odd Sisters*, and the *Shepherdesses* of two Unities, named after Bristol and Ashton respectively. . . . The *Odd Sisters* are not an Affiliated So.: there is no district fund; and no connexion between the Lodges, of which there are 3 or 4 open in Bristol. The existing Order was started as an opposition to an Order of *Blue Odd Sisters*, introduced from Newport (Monmouthshire), *now extinct*. The benefits in one Lodge are 6s. 6d. sick pay, £8 death benefit, and 10s. for a confinement. There is also a "7 years' bonus" of £2 for those who have drawn no benefits during that period. In one case I learned that the Registrar had objected to this rule; but he gave way on its being represented to him that it was impossible to carry on a *Woman's Club* without it; and it is common in all the Bristol Women's Clubs. There are *Shepherdesses* of the Bristol and Ashton Unities; the second was started by some Shepherds of that Unity to compete with the first. These are Affiliated Orders, with 3 or 4 Lodges each, generally regis. The "District" and other requirements of the Affiliated system do not work well. . . . Many of the Clubs, and notably the Lodges of the *Shepherdesses* and *Odd Sisters*, appear to be got up by the landlords of public-houses, and to be conducted in their interest.

Mr. Stanley does not take a more favourable view. In his Rep., speaking of *Lancashire*, he says:

30 or 40 years ago, when the Affiliated Orders were making great progress, and gaining in popularity, the idea spread—and *Secret Sos. of Women* were formed on the analogy of the *Odd Fellows*.

Such a So. is the *Female Secret Ins. So.*, in the Oldham, Saddleworth, Mossley, and Stalybridge Districts. There are 20 Lodges and the list makes a fine show on paper; but their numbers have been dwindling for many years, and so have their funds. They can only show, at the close of 1871, 330 members, and £71. They have long ceased to give any sick pay, and are kept for the sake of the funeral money. They meet monthly in their Lodges, and *ad.* a member must be spent in drink. They are apt to consume this in spirits, and the Sec. of one of the Lodges complained to me that he had witnessed very unseemly sights in consequence of this rule. At the quarterly meetings, each delegate (a woman) receives 6d. worth of liquor. The Order, in 1856, numbered 566 members.

Mr. Stanley, in his Rep. upon *Staffordshire*, speaks of a Lodge (No. 52) of the Loyal Order of *United Sisters* at Burton-on-Trent. He says, "There are 6 Lodges in the District. No. 52 has 9 members, and £25. These Clubs are said to be chiefly popular in the villages. These Women Lodges do not, as a rule, flourish." He speaks of having found Female Sos. especially numerous in the framework, knitting, and mining districts of *Nottinghamshire*; as Sir Geo. Young had found them abounding in the straw-plaiting regions of *Bedfordshire* and *Hertfordshire*. Mr. Daniell found some of these Sos. in *Wales*, and selects one at Mold for especial commendation. Its T. are certified by an actuary, and it has periodical valuations. Among the Dividing Sos. of *Aberdeen*, a certain number are composed of Females—and all *unregistered*.

Female *Burial* Sos. appear to be numerous in the Northern Counties of Eng., where they are sometimes called "Life Boxes." In the Chester-le-Street Union, out of a total of 16 permanent Sos., of the isolated type, Mr. Culley found 10 to be Women's Life Boxes, numbering 1588 members out of a total of 2835—only 3 apparently being *unregis.*, and one of these having deposited its rules. The 10 Sos. having £2512 funds. Mr. John Snowball, Sec. to the *Royal Matrons F. So.*—apparently the most important of the locality—gave evidence, from which the following details are drawn:

Ours is a Friendly So. with 305 members. They pay 9d. each monthly at the "Fighting Cocks Inn." The committee are all women. . . . Members have no books to show payments. All depends on my book. "Legacies" (funeral claims) are paid by check on Treasurer, accompanied by medical certificate. The entry-money is 12s., and contribution 9d. p. month till 23 years of age; members are then reduced to 6d. p. month. All members make their own payments: we have no collector. The total fund, Jan. 1, 1871, was £763 19s., and on Jan. 1, 1872, £782 15s. 5d. The allowances for funerals are: a member £12; member's husband £5; member's child £2. The So. has existed for 40 or 50 years, and the members are of all classes. On two occasions the So. has divided £1 p. head.

A publican and gardener at Pelton, Mr. Errington, describes another class of Sos.:

I am also Secretary for a Woman's Life Box (a certified So.), which has about 173 members. They have nearly £200 in hand, and have never divided. They pay 7½d. a month for benefit, and 1½d. to house. The women treat their yearly club as a savings bank. Each woman only drinks her own allowance, and when any woman not present at a former meeting comes to pay up arrears, she can take her allowance away in a little bottle: they often do.

Lancashire also has some Female *Burial* Sos.: as the *Female Florists Funeral So.* at Leigh; which appears to be a branch of a small *Burial* Order with 6 Lodges.

"The tendency (say the Commissioners) of Female Sick and *Burial* Sos. to merge into mere *Burial* Sos., it may be observed, is very strong." The contributions of the *Aberdeen* Female Dividing Sos. are now confined to 1d. a week towards a Funeral Fund for members and their children—Female *Sickness* Sos. having proved a failure. Sir Geo. Young says of *Bristol*:

A single Female *Burial* Club—the *Friend-in-Need Female Benefit So.*—is regis. in Bristol. It is a residuary *Burial* So., with "7 years' benefit," but no sick pay: that is to say, the rules provide for sick pay, and at one time the "Box was opened;" but at the end of the first week 14 were "on the Box," and the Sec. closed it forthwith. It is dying out, and will prob. divide its funds shortly; but the Sec., a respectable bootmaker, is determined to see that one or two old ladies of 70 or 80 years of age shall "get their money first." There are 32 members, and £150 in stock. The benefit is £60 7s. 6d. at death.

Again, many of the Female Sos. have men for their officers; but this is not always the case. Mr. Stanley, writing of *Leicestershire*, says:

At Thrusington there is a Female Club, founded in 1843, regis. in 1865, with 80 members and £470. They have an ann. tea party, which all within three miles must attend, or pay a fine of 6d. The contribution is 10s. 4d. per year; the benefits are 4s. a week for 26 weeks; then 2s. for the rest of sickness, and medical attendance. The funeral benefits mount up to £4 10s. at the end of 10 years. The accounts are audited by 2 women, and the arbitrators are women. The Club was taken into the County Court once by a member who did not like the notion of female justice, and would not abide by the rule; but the Judge decided against her, and the Sec. said, "The Barrister (Mr. Tidd Pratt) wrote to say that women were legal for a So. of women; and we told the Judge we had the Barrister's opinion, and he said he did not need to be told that; so the woman was cast."

At Bradford (Yorks), on the other hand, where there is an old Female So. (founded 1800) with 102 members and £1237 funds, the Sec., who had been connected with the So. for 60 years, found the members took no part in the management.

In the *Female Benefit So.* of Sheffield, with 121 members and £1404 funds, the So. is entirely managed by women, with the exception of the Sec. and Beadle—the duties of the latter being "to warn members of their arrears before they become suspended." The members generally take very little interest in the management.

Finally, Sir Geo. Young, speaking of the Straw-plaiting districts, says:

The exceptional success which has attended the Female Clubs in this neighbourhood, and the much better management discoverable among them than in the Bristol Clubs above noticed, I take to be a pretty clear proof of the expediency of associating Sick Clubs with the receipt of weekly wages: and therefore of disassociating this benefit from Female Clubs in general. It is not, of course, to be recommended that Female Sick Clubs should be made illegal: far less that they should be excluded from the Registry; but the conclusion appears to be important and worthy of remark. The best and most obvious provision for the women in a working man's family is the man's own club: if to the usual benefits which are thereby afforded can be added a subs. for medical aid to the whole family; such as has been sometimes attempted among the Foresters, and is frequently provided in Clubs started for that purpose only by the Doctor himself. The *Female F. So.* appears to be of small comparative value. When girls earn wages, the conditions are of course altered; but even here the accumulation of savings in a savings bank—more especially if the limited ins. against sickness provided by Mr. Best's deposit principle could be secured—appears far preferable to the machinery of an ordinary Sick Club. In conclusion, if the absolute prohibition of any sort of Club is defensible, that of Women's Clubs, meeting in public-houses, has most to be said for it.

Various other details regarding F. Sos. for Females will be found scattered through the present art.

12. Sos. Estab. under the Authority of the Sec. of State under Sec. 9 of the F. Sos. Act.—The Act of 1855, already fully reviewed, after enumerating certain specific purposes for which F. Sos. might be estab., added: "3. For any purpose which shall be authorized by one of H. M. Principal Secs. of State, or in Scot. by the Lord Advocate, as a purpose to which the powers and facilities of this Act ought to be extended." It appears that under this authority there have been regis. Sos. embracing (*inter alia*) the following purposes:

1. Assisting members when travelling in search of employment. 2. Granting temporary relief to members in distressed circumstances. 3. Relief or maintenance to members in case of lameness, blindness, or bodily hurt through accident. 4. Purchase of coals and other necessities to be supplied to the members. 5. Insuring against loss by disease or death of cattle employed in trade or agriculture. 6. Accumulating at interest for the use of members the surplus funds remaining after providing for benefits insured against [all those granted in 1855]. 7. Relief in case of shipwreck, or loss or damage to boats or nets [? 1864]. 8. Sos. formed for the purpose of social intercourse, mutual helpfulness, mental and moral improvement, rational recreation, and for affording facilities for the meeting of F. Sos. legally estab. [1864]. 9. Payment by F. Sos. of sickness allowances on claims of insanity. 10. Payment to members afflicted with insanity, paralysis, and blindness [1870]. 11. Assisting members during the slack season of trade [1872]. The Commissioners say hereon:

612. Some of the above authorities, it will be observed, amount simply to liberal interpretations of the Act: such are those which authorize payments for accidents and infirmities of mind or body. Others, such as the one for Shipwreck Sos., restore purposes formerly expressly provided for by the Acts [see 9 & 10 Vict. c. 27 (1846)]. Others again cover ground which is really occupied by specific legislation—as that for the purchase of coals and other necessities for the members: a purpose coming under the *Industrial and Prov. Sos. Acts* [first Act 1852], or for the ins. of cattle—for which purpose the 29 Vict. c. 34 has since [1866] been enacted. Others are of wider scope: enabling the F. So. to provide against simple distress or want of employment. The widest exercise of the Sec. of State's power is that by virtue of which Working Men's Clubs and Institutes have come to be reckoned among regis. Sos. . . .

These have no funds except such as are necessary to carry on the bus. of the Club; they do not provide for sickness or death; and indeed have none of the features ordinarily incident to a F. So.; and we concur with the Commissioners in thinking "that the authorizing Working Men's Clubs to be regis. under the 9th clause of the Act was a mistake" (p. cxlviii).

Regarding Sos. for Ins. against Shipwreck—these are very ancient, and can be traced back to the early Gilds. They will be spoken of under GILDS; as also, and more particularly, under MARINE INS. CLUBS. [SHIPWRECK, INS. AGAINST.]

Finally the Commissioners say:

620. In add. to the Shipwreck Sos., there are also here and there a few Sos. for purposes now provided for by the "Industrial and Prov. Sos. Acts," or the "Cattle Ins. Act." Mr. Stanley

mentions a "Contributory Coal So.," and a "Clothing Club" at Grantham—both, however, of old standing, having been regis. in 1848, apparently under what used to be known as the "prudent investment clause" of the F. Sos. Act of 1846. . . . To the same class and period belong no doubt the "Provident Corn Mill So." of Thirsk, . . . and the "Co-operative Stores" of Tredegar, . . . both of which figure in the returns for 1871; which also includes a "Hope Coal Club" in Banner Street, St. Luke's, Middlesex. . . . None of those, however, appear in the Registrar's Rep. for 1872. . . .

622. It will be observed that, with the exception of Working Men's Clubs and some Cattle Ins. Sos., we are not able to speak of any of the Sos. mentioned under the present head as having been estab. under the special authority of the Sec. of State; and indeed the prob. is that the great bulk of them came into existence, as some of them certainly did, under the older F. Sos. Acts; but it appeared convenient to speak of them at this place, as instances of the purposes for which, under that special authority, Sos. may be regis.

We may add by way of supplement to the preceding the following list of purposes for and to which F. Sos. have been estab. or applied:—1. Burials. 2. Sickness. 3. Compensation for injury, fire or flood. 4. Confinement of member's wife. 5. Medical attendance. 6. Allowance during imprisonment for debt. 7. Promoting emigration. 8. Militia substitute. 9. Travelling allowance while seeking employment. 10. Supply of coals and relief in winter. 11. Ins. against hail. 12. Ins. of cattle. 13. Loss of, or damage to, fishing boats and nets. 14. Loss of sailors' "kits." 15. Temporary assistance to members "during slack season of trade." 16. Supply of clothing. 17. Compensation during accidental injury. 18. Insuring workmen's tools against destruction by fire.

13. Cattle Ins. Sos.—Under title CATTLE INS. we have already given a general hist. of the progress of this branch of bus. The prevalence of the Cattle Plague induced the Brit. Legislature to enact the 29 & 30 Vict. c. 34 (1866)—*An Act to give further facilities for the estab. of Sos. for the Assu. of Cattle and other Animals*. These facilities were given in the way of extending the operation of the F. Sos. Acts, in the manner and to the extent indicated in the art. already referred to, "for the assurance to any amount against loss by death of neat cattle, sheep, lambs, swine, and horses, from disease or otherwise." It is clear, however, that the Sec. of State's authority had prior to this been given to the estab. of Mut. Cattle Ins. Sos., under the Act of 1855. There were at least 8 of these existing in E. and W. before 1866, several of which we have named in the art. referred to. It is known too that several Sos. of this class existed on the Scottish Border, as also in Scot., which were not regis. at all. Several of the Scotch Cow Clubs combine the ins. of funeral allowance on the owner's death, as well as payment on death of cows.

It does not seem possible to obtain a complete return of the Cattle Ins. Sos. regis. under the F. Sos. Acts. They appear to be most numerous in the counties of *Lincoln* and *York*. In 1872 there were 11 in the former and 5 in the latter. Many of these are mentioned under their alphabetical titles; and we shall hope in the T. to be given by way of Supplement to this work to include a fairly complete list of them.—See **PIG INS. CLUBS**.

The Commissioners—referring to the exemption from all limitation of the amount of ins. which is made in favour of the Sos. of this class formed under the Act of 1866—say:

626. It does not appear easy to justify the privileges thus granted to Cattle Ins. Sos., however easy it may be to explain their enactment through the panic of the Cattle Plague, in the midst of which the Act was passed. It is not easily perceptible why a pol. of ins. for £2500, for instance, on the life of a "Master Butterfly" should be exempt from stamp duty, whilst one on the life of its owner for £200 or *1*l.** would be subject to duty; nor why the prem. in the one case should be legally recoverable, and not in the other. . . .

Mr. Culley's Rep. (p. 13) contains some interesting information regarding the working of Cow Clubs on the Scottish Border and in Scot., which we may here condense with advantage:

In my notes on the evidence which I received in several rural districts of Scot. and the North of England, I have drawn your attention to the extent to which the custom of yearly or half-yearly hiring saves agricultural labourers from the necessity of belonging to Sick Benefit Sos.

The yearly hiring, however, is usually accompanied by a system of payment in kind, which attains its greatest development in the Border Counties; and there gives rise to another class of Sos. viz., Cow Clubs, or Clubs for the Ins. of Labourers Cows, which are or ought to be regis. under the F. Sos. Acts.

At one time the custom of allowing a "cow's keep" as part of the wages of a steward, shepherd, or hind was, in the Border Counties, almost universal; and though for weal or woe the allowance of £8 or £10 is now often accepted in lieu of the cow's keep, there are still cows enough belonging to farm servants to induce them to keep up Mut. Ins. Clubs.

The examples of these Clubs about which I received evidence in Scot. are almost altogether managed and supported by the insurers themselves, and are unregistered. . . .

According to the evidence which I received, the Cow Clubs of the South of Scot. are, as far as management expenses are concerned, models of cheapness; but a comparison of the prem. paid on an average of years shows that the insurers would do well to look closely into the rules of their Clubs, as well as the manner in which they are carried out. . . .

As with the ins. of human lives, cow insurances ought to be effected on a graduated scale; but in case it may be of any use to the promoters of Cow Clubs, I may state that up to 12 years of age the general result of the statistics I have received *points to an ann. prem. of 5 p.c. on the cow's pol.*

For Cow Clubs, as for human Benefit Clubs, it is impossible to frame rules such as to avoid all disputes; and though in the Scotch Cow Clubs, from the good faith of the managers and members, disputes seldom arise, and are more easily settled (for reasons I have explained elsewhere) than in Eng., I think it is desirable that all such Clubs should be regis. in the simplest form that would allow them, through their officers, to have a *locus standi* in Court.

It is added by way of note:

The habit of insuring cows appears more prevalent in East Lothian than in any part of my district;

and in that country the Clubs are entirely managed and supported by the insurers. On the large farm of Mr. Geo. Hope, a well-known occupier in the county named, all the farm servants' cows are insured, and so with other farms in the district. In Selkirkshire an old shepherd, who, according to the custom of the hill district, had two cows, said to me, "We ken naething about coo clubs hereaway. If a shepherd's coo happens death, we just get up a subscription to buy him a bit beast."

See Class 17—*Unregistered Sos.*

14. Sos. with Deposited Rules under Sec. 44 of the F. Sos. Act.—In the chronological portion of this art. we have shown (under date 1855) the circumstances under which certain of the Affiliated Sos., which were not in a position at that period to seek complete regis., might, by depositing their rules, obtain the limited but beneficial protection of the Acts as to cases of disputes between the So. and its members, and also in view of punishment for fraud. The Commissioners remark:

628. The position of a So. with *deposited* rules is a somewhat singular one. The Registrar has to satisfy himself that its purposes are those, or akin to those, of a regis. F. So., and are not illegal. He has no power of advice, and his certificate is given once for all; at least the Act contains no provision as to alteration of rules, or the making of new rules by Sos. after deposit (although it might be contended that the words, "provided a copy of such rules shall have been deposited with the Registrar," mean the rules for the time being of the So., whether orig., altered, or new); nor do the provisions of the Acts as to *dissolution* apply to such Sos., from which, moreover, no returns of any kind are required. Beyond, therefore, the fact of their having once deposited their rules, there is . . . no record of the existence of such Sos., nor any official means of ascertaining their condition and proceedings.

In the Rep. of the Regis. of F. Sos. in Eng. for 1868 was given a return (to July, 1869) of all Sos. whose rules had been deposited up to that year. They amounted to 463 (in nearly 14 years) or an average of a trifle over 33 p.a.—the number appearing to be rather diminishing than increasing. Confining ourselves to F. Sos. only—for the Return embraces a number of Trades Union Sos., for which indeed the regulation had been orig. devised—the Return embodies samples of all classes of F. Sos.: Lodges and Districts of Affiliated Sos., from the Manchester Unity downwards, ordinary Sick and Burial Sos., Burial Sos., including Church Gilds, Accident Funds, Yearly Sos., Juvenile and Sunday School Sos., Ins. F. Sos., Coal Sos., Cattle Ins. Sos., Female Sos. of all sorts. Lancashire and Yorkshire here, as in most other instances in this art., take the lead—the one with 137 Sos., the other with 112; making up together more than one-third of the whole number. Middlesex follows next with 40; Nottingham with 26. The Commissioners, reviewing this Return, add:

How many of the Sos. mentioned in the Return have since gone out of existence, or conversely have passed on to the registered condition,—still more, what they may represent in point of membership or funds,—are matters as to which there are absolutely no data, beyond the few isolated facts which have been mentioned in evidence before us, or in the course of our Assistant Commissioners' inquiries.

Some instances are given of the objects in view by various Sos. in so depositing their rules which are not very logical; while others were almost driven to it by the refusal of the former Registrar to enrol rules which contained provisions for "out-of-employment" benefit. The Commissioners say:

630. We have already shown that the system is also generally adopted by a certain class of Convivial and Benevolent Sos., such as the *Cemented Bricks* and *Antediluvian Buffaloes*. That the form is consistent with every variety of management results sufficiently from the fact that in the Burial So. Class we have quoted 2 Sos. with deposited rules, almost as types—the one of economy (the *Staleybridge Economical Burial*), the other of extravagance (the *Collecting Burial Club* at Sheffield). . . . The most remarkable So. of the kind is the *Bratton Fleming Death Club* or "Grand Provision." . . .

632. When we consider the large privileges to be obtained by mere deposit, and the extreme facility of the form, the very minute proportion of Sos. which have had recourse to it (in 1872, 20 out of a total of 1685 regis. Sos. and Sos. with deposited rules, or under 1 1/8 p.c.) may cause surprise. *It seems to us to show that the requirements of the existing law with regard to registration cannot be said practically to go too far in the way of interference with the habits of the people.*

In the South of England the class of Sos. which deposit rules the Commissioners consider to be almost unknown. This, however, is hardly so; as a more careful examination of the Return spoken of will show.

15. Benevolent Sos. Certified under Sec. 11 of F. Sos. Act of 1855.—We have already seen, while reviewing the Act of 1855, that Benevolent Sos. and Charitable Institutions "for relieving the physical wants and necessities of persons in poor circumstances," and for analogous purposes, could be regis. under that Act; and have also seen an enumeration of the advantages which followed therefrom. But many such Asso. had really been regis. under the previously existing F. Sos. Acts. There appear to be very few of the Asso. of this class regis. in the Northern Counties of England, and none in Scotland. The greatest number regis. is in the county of Middlesex, of which the following are types: The *Operative Coachmakers* Benevolent So.; the *London Copper Plate Printers* Benevolent Fund; the *Prince of Wales* Philanthropic So. But the names are not always a guide to the exact nature of the Asso. The Commissioners say:

638. Within this class, as has already been mentioned, it is considered that one group, at least, of bodies regis. as F. Sos. [Working Men's Clubs and Intitutes—see Class 12] had better have been placed.

639. A suggestion has, indeed, been made before us, by a witness who seems to have devoted much thought to the subject, that all *Provident* and *Benevolent Asso.* which solicit subs. from the public should be compelled to deposit their rules, and send Yearly Reports and Abstracts and Cash Accounts

and submit to a few other requirements. "There are at the present time, I am told," said the witness, "no less than 900 Prov. and Benevolent Asso. in Lond., of which neither the Gov. nor anyone has any knowledge whatever, except what is gathered up casually at their ann. meetings."

640. The question thus raised appears to us one of very great importance, but which would require for its solution inquiries almost as extensive as the F. So. question itself; and we have not felt it incumbent upon us to undertake such inquiries.

16. Sos. under the Earlier F. Sos. Acts.—The Commissioners dispose of these in one paragraph as follows:

641. We have not felt ourselves called upon to make any special inquiries into those Sos. estab. under Acts prior to the Act of 1855, and which by the 2nd sec. of that Act are to be deemed subsisting Sos. "as fully as if this Act had not been made," until dissolved or united with some other So. Specimens of such Sos. may be found in all the classes above enumerated, down to the last spoken of, the Benevolent Sos. Some of them, it may be observed, are in the legal ownership of land or houses acquired by gift or purchase prior to the Act of 1855—the restrictions of which, as to the acquisition of land, however, are expressly extended to such Sos.,—and considerable difficulty is thereby found to arise as to the application of their funds to the repairs or necessary rebuilding of their existing house property. Others have legal rights of division, or, again, legal rules for raising the expenses of a dinner or feast. Since, however, such Sos. are necessarily dying out every year, they appear to us to afford rather objects for curiosity than for practical investigation.

17. Unregistered Sos.—Regarding these the Commissioners remark, "Although the terms of our Commission only require us, so far as Sos. are concerned, to inquire into and report upon the organization or general condition of Sos. 'estab. under' the F. Sos. Acts, it has been impossible for us to shut our eyes to the fact that a vast number of Sos. entirely similar in purpose to those which are so estab.—except as respects the one fact of their not availing themselves of the law, even by the easy means of the deposit of rules—do stand outside its pale, and that their existence must have a most important bearing upon the value of the law itself." In dealing with them now, the Commissioners consider them as they separately exist in the two great divisions of the kingdom—"the marked difference which exists between England and Scotland in respect of regis. will, we think, justify an exceptional mode of treatment based upon that difference." Of Ireland they did not deem it necessary to speak—there not being 50 unregistered Sos. (according to the Rep. of Mr. Littledale, Assistant Commissioner) in that country.

1. ENGLAND.—"With the exception of the General, County, and Deposit Sos., there does not appear to be a single class of F. So. which has not in England its unregistered representatives." In the Oldham District Mr. Stanley found among the Affiliated Orders 100 unregistered to about 91 which were regis. In the Ashby-de-la-Zouch Union he found 22 unregistered against 25 regis. among 7 different Orders of Affiliated Sos. Further south the proportion of regis. to unregistered Sos. appeared much larger. The Commissioners arrived at the opinion that about 40 p.c. of the Local Sos., whether in Town or Country, were unregistered; and some of these were Sos. of considerable magnitude: thus the Millstone Lane So., founded in Leicester in 1827, had in 1872 some 885 members, with funds £3727. There was another large unregistered So. (The Bond Street So.) in the same town. In Kidderminster, the So. of Protestant Dissenters, estab. in 1790, had remained unregistered; while in Grantham the Old Amicable So., claiming to have been founded in 1714, had never been regis. With Burial Sos., as we have seen, it appears to have been the exception rather than the rule to register. The Dividing Sos. very frequently do not regis. The "Box and Pit" Clubs, and the "Broken-bone" Clubs, usually are unregis. A great many Female F. Sos., especially in the Midland Counties, are unregis.

2. SCOTLAND.—It is stated in Mr. Culley's Rep. that in 12 selected Districts the unregistered Sos. outnumbered the regis. ones in the proportion of 159 to 30, and form consequently more than 84 p.c. of the total number. On the other hand, the disproportion in point of membership was far less—giving 15,042 members to the regis., and 26,856 to the non-regis.—or over 64 p.c. of the whole to the latter: a difference, however, which is prob. entirely owing to the large Collecting Burial Sos., invariably registered bodies." Mr. Culley says:

Supposing then we assume (an assumption which may afterwards be corrected) that there are 520 regis. F. Sos. in Scot., it would seem probable (if my districts were, as I believe, well selected) that there are 2756 of such Sos. unregis., of which nearly 540 . . . are permanent Sos., and the remaining 2216 Yearly Dividing Sos. of a class much superior to the Yearly Sharing-out Clubs of the North of England.

It will be seen from the T. that 6 out of 130 Yearly Dividing Sos. are regis., and if we deduct that number from the total of the 6th col. of the T., we find that only 24 permanent Sos. are regis. against 26 unregis. No doubt, by far the most important permanent Sos. are regis.; but it is rather a startling fact, and suggestive of the inquiry I found it necessary to make into the position of unregis. Sos. under "Scots' Law," that more than one-half of the permanent F. Sos. in Scot. are unregis.

Many interesting details are given.

Returning to the general aspect of unregis. F. Sos., whether located in Eng. or Scot., we may give the following passages from the Commissioners' Rep. (pp. clxxvi-ii):

763. From what has been said, it will appear that the unregis. F. Sos. form really a world in themselves: in Eng. prob. nearly co-extensive with, in Scot. certainly far surpassing in magnitude, that of the regis. bodies. At the same time it is unquestionable that the most considerable specimens, in every class of So. to which regis. is open, are regis.

764. We may separate the unregis. bodies roughly into 2 divisions—those that desire regis. and those that do not care for it. To the former class, as will have been seen, belong the Yearly Sos. of Newcastle, besides many individual instances, which will be found scattered through the pages of

Mr. Culley's Rep. Of the latter, the Brit. Unity of the *Philanthropic Asso.*, and the *Ilkerton and Brwash Valley Order of Odd Fellows*, are the most prominent examples. Setting aside cases such as these, which may be set down to the account of prejudice, and others which may be due to ignorance (as that of the *Caledonian* and *Earl Grey* Yearly Sos. of Edin., whose treasurer alleges the "guinea fee" as one of the two reasons against regis.—there being in fact no fee payable); the chief motives alleged for non-regis. appear to be, first, the refusal of the Registrar to regis. *Dividing* or *Yearly* Sos., and second, the restrictions imposed by the Act upon *investments*, as in that of the *Carson F.*, or the *Ebenezer Lodge of Druids* at Sheffield; to which indeed must be added a third, prob. at least as potent, though unavowed—the refusal of the Registrar to sanction rules for a compulsory feast or dinner, or for liquor payments. Other reasons are alleged in particular instances, as that of the *Kidderminster Provident So. of Protestant Dissenters*, which "remains unregis. from a fear that if regis. they would not have full control over their members as to expulsion"; or that of the *Edinburgh Operatives and Gen. Benefit So.*, of which the president says, "We have once or twice discussed the question of regis., but on the whole we consider that the fact of our not being regis. is a good check on litigious members."

765. In some cases, as those of subsidized Sos., whose prosperity depends mainly on some cause lying outside of the law, Sos. seem to remain unregis. simply because no call to regis. is felt. Thus the Sec. to the *North Eastern Railway, Darlington Section, Superannuation So.*, above referred to, when asked why his So. had not regis., replied: "I am not aware of any motive for this So. abstaining from being regis."

The following is added to para. 764, by way of footnote:

There appears to be in like manner a strong objection on the part of the Wesleyan patrons to regis., owing to their strict system of ecclesiastical discipline. . . .

The *Bramley Loyal F.* (Yorkshire), which claims to have been founded in 1765, was orig. regis. (or rather enrolled), but in consequence of a magisterial decision which was considered unjust, broke up and reformed outside the law, to avoid magisterial interference. The So. has, however, an investment in land which would prevent its regis., so that virtually it comes under the second motive for non-regis.

The question of the *legal status* of unregis. Sos. is discussed in the following para., and some very important points are raised:

767. It becomes important, considering the extent to which unregis. Sos. prevail in many districts of Eng., as well as throughout Scot., to consider what the status of their members is. (We need hardly repeat that throughout this chap. we use the term "unregis." exclusively of Sos. with deposited rules.) In Mr. Brabrook's newly pub. ed. of *Pratt's Law of F. Sos.*, a chap. is inserted on the subject of "F. Sos. not regis." "Such Sos.," he says, "having lawful objects in view, do not become unlawful merely because they fail to acquire a statutory status"; but an unregis. So. "is in the eye of the law a mere partnership or club." In support of this position he quotes one or two cases dating back to a period anterior to late Joint-Stock Cos. statutes; and reprints Mr. Russell Gurney's valuable Act to amend the law relating to larceny and embezzlement (31 & 32 Vict. c. 116), enabling the prosecution of partners for such acts. It must, however, be borne in mind, with reference at all events to the larger of those bodies which divide their funds, that the 4th sec. of the Cos. Act, 1862, enacts that "no co., asso., or partnership, consisting of more than 20 persons, shall be formed, after the commencement of this Act, for the purpose of carrying on any other bus. than that has for its object the acquisition of gain by the co., asso., or partnership, or by the individual members thereof, unless it is regis. as a co. under this Act, or is formed in pursuance of some other Act of Parl., or of Letters Patent, or is a co. engaged in working mines within and subject to the jurisdiction of the Stannaries." It would thus seem at least doubtful whether an unregis. So. of more than 20 members, which places out at interest the contributions of its members, and divides its funds among them at stated periods, is not since the Act of 1862 an illegal co.

768. The Life Assu. Cos. Act, 1870 (33 & 34 Vict. c. 61), again, can scarcely be overlooked in respect to these bodies. Under this Act "the term 'Co.' means any person or persons corporate or incorp., not being regis. under the Acts relating to F. Sos., who issue or are liable under pol. of assu. upon human life within the U.K., or who grant annu. upon human life within the U.K." Now according to the judgment of the present Lord St. Leonards, when Lord Chancellor of Ireland, in *Phillips v. Eastwood* (Lloyd and Gould, 291) the word "policy" has no technical meaning. "What is a pol.?" the Lord Chancellor is reported to have said: "nothing but an engagement by the directors that the funds of the Co. are liable to pay a certain sum of money upon a given event." This definition would, it would seem, include every form of ins. practised by a F. So.; and it may thus be contended that every unregis. F. So. granting death benefits is within the provisions of the Life Assu. Cos. Act; and on failure to comply with those provisions is subject to heavy penalties. This much at least is certain, that all unregis. F. Sos. are within the Life Assu. Act, 14 Geo. III. c. 48 (already referred to by us in reference to the assu. of the Prudential Co.), and that therefore, where no pecuniary interest exists, all ins. with them, whether on life or any other contingency, such as sickness, are void, e.g. ins. of children by their parents. [GAMBLING INS.]

In support of this view, it is stated in Mr. Culley's Rep. (p. 154) that on the prosecution of any defaulting members by the unregis. Yearly Sos. of Newcastle and Gateshead, the So. is invariably non-suited. [LEGIS. FOR AND AFFECTING INS. ASSO.]

Sickness and Mort. Statistics.—Chap. V. of the Rep. is "On Rates of Prem. and Statis. of Sickness; and on rate of mort. prevailing among the classes comprised in F. Sos." This question we propose to treat under a distinct heading—F. SOS., MORT. AND SICKNESS EXPERIENCE OF; but it will be well briefly to review the conclusions of the Commissioners hereon. The opening para. of the chap. are as follows:

771. From the details previously given, it would appear that the condition of F. Sos. is generally far from being such as to afford to their members any security that they will receive the benefits for which they have subs.

772. A main cause of the widespread insolvency of F. Sos. is the inadequacy of the rates of prem. for the benefits promised.

773. Before a proper T. of prem. can be constructed, the following preliminary inquiries are necessary: [1] What are the occupations and conditions of life of the persons who are likely to constitute the So. ? [2] What rates of sickness and mort. will such a So. prob. experience ? [3] What T. of prem. prob. correspond with such experience ?

There can be no doubt these are the vital points involved. The late Mr. Neison would have asked in addition, "And in what *locality* are the operations to be conducted?"

The Commissioners arrive at the following general conclusions: 1. That uniform prem.

are a cause of inadequacy in rating the members; and that these are adopted in ignorance, competition, copied rates, and inadequate data. 2. That the sickness of particular trades (*i.e.* occupation) are little known. On this last head their obs. are especially important:

787. The sickness experienced among a few trades is known, *but for a large number of unhealthy occupations no separate records exist*, or, at least, they have not been made the basis of useful calculations. Mr. Ratcliffe, in his recent Report to the A. M. C. of the Manchester Unity, shows that to secure the same sick benefit, Miners and Colliers should pay about 30 p.c. more than the general class of workmen. . . .

788. There are several other occupations which no less require separate investigation: and there can be no doubt that the T. in general use include, *without distinction of locality or occupation, classes differing too widely to be safely massed into one T.* What is needed is an investigation into the sickness experienced by a number of well-conducted Sos., and particularly among those which distinguish the occupations of their members; and that from these statistics there should be deduced T. of prems. and auxiliary valuation T. . . .

We shall refer to this question more in detail under the special title already indicated. We give the concluding passage of the Commissioners' Rep. under this head:

820. It results from the foregoing that the solvency of any So. using a general T. of prems. largely depends on the proportion of its members belonging to unhealthy trades; and that if Sos. do not adopt carefully adjusted contributions applicable to members belonging to each class of occupation, the proportion which can be admitted of those following unhealthy callings should be determined, and should be introduced into the rules. This is also true for the contracts dependent on sickness as well as those which have relation to mort.; but it has been ascertained that in some trades sickness and mort. are in opposite relations: that is to say, the trade which causes a high rate of sickness does not involve a high rate of mort.; but on the contrary a rate of mort. lower than the average.

See F. Sos., SICKNESS AND MORT. EXPERIENCE OF; LOCALITY; and OCCUPATION.

The Poor Law and F. Sos.—Chap. VI. is "On the Connexion between the Poor Law and F. Sos." Many authorities on that part of the subject have been reviewed in the early, or historical, portion of this art.; we propose therefore but briefly to glance at the conclusions arrived at by the Commissioners thereon:

821. The Poor Law system in this country has so many points of contact with the working of F. Sos., that any inquiry into the latter would be obviously incomplete which failed to take into account the effects upon them of a State provision for the relief of destitution. There can be no doubt, on the one hand, of the beneficial influence exercised upon Poor Law expenditure by F. Sos. even in the present condition; and the hist. of legis. on their behalf would show that their promoters have kept this end in view as among the most important objects of their work. . . . It has been frequently alleged that no less a sum than £2,000,000 is ann. saved to the ratepayers by the operation of F. Sos.; and if this be true under present circumstances, it is clear that any improvement in the stability of these Sos., or encouragement of people to join them, would not only benefit the labouring classes by leading them to help themselves instead of depending on others, but might tend to alleviate in no small degree the presence of local taxation now so generally complained of.

822. From the other point of view, however, the existing relations between the Poor Law and F. Sos. would appear to be by no means satisfactory. The increasing disposition of the labouring classes to throw themselves upon the poor-rate has been of late years a source of no little anxiety to those who have had most experience in the administration of the law. The replies which have been furnished by the various Boards of Guardians in E. and W. to a question on this subject, sent out at our instance by the Local Gov. Board, show that, while a feeling of independence may still, generally speaking, be said to prevail among the poor in that part of Eng. north of the Trent, it exists but to a very slight degree in the southern half of the kingdom. It has been stated in evidence before us that in some districts, especially in the South of Eng., "the labourer calls in the Parish Doctor on the slightest account whatever, and always looks to the Poor Law for relief in old age;" and under these circumstances it was hardly surprising to hear from many experienced witnesses that the Poor Law acts as a direct discouragement to providence: either preventing labourers from joining clubs at all—lest they should waste money by doing for themselves what they have learned to expect others to do for them; or leading them to join such clubs as will not interfere with their receipt of what they have begun to consider as their own property—as a sort of re-charge on the land for their benefit—and as part of the wages they are entitled to for their labour. . . .

They proceed to quote detailed evidence in support of their views. This part of the subject will be further considered by us under POOR, INS. FOR THE.

State Provision for F. Sos. Objects.—This subject, which is contained in Chap. VII., under title "Of State Action," naturally arises out of the considerations involved in the preceding chap.; and it looks fairly in the face the problem as to the relation in which the State, as a whole, should stand towards such Sos. "The question how far the State should take upon itself the function of making any provision for the objects now aimed at by F. Sos., is one of great delicacy and difficulty." The Commissioners, while admitting the existence of this question in so many words, wisely abstain from its controversial aspect. They treat it more historically than otherwise. Thus:

823. The sketch which we have given of the legis. as to F. Sos. shows that the State has, to a great extent, taken upon itself the task of encouraging, aiding, and supervising a work of such high national importance as that of assisting the working classes of this country to provide for their own wants in times of need, sickness, or other casualty, by savings made in times of health and strength, without either throwing themselves upon the system of State aid afforded by the Poor Laws, or being dependent on individual charity. Further evidence of the same disposition is to be found in the hist. of legis. with respect to several cognate inst., especially that of the Savings Banks. . . .

824. In the matter of F. Sos. the State has not as yet gone quite so far as it has done in the case of the Savings Banks; but its course has been in the same direction. Regulating Acts have been passed, and the investment of the funds with the Commissioners for the Reduction of the National Debt has been authorized; and in this case a certain amount of pecuniary loss would appear to have been sustained by the Gov. The Gov. have not attempted to undertake on their own account any kind of Ins. against Sickness, which constitutes so large a part of the bus. of F. Sos.; but they have estab. a system of annuities, and also of ins. of small sums payable on death, which, to a limited extent, competes with the other classes of bus. in which the Sos. are engaged. The evidence which we have

taken on the subject seems, however, to show that the attractions offered by the Gov. are at present insufficient to induce many of the working classes to avail themselves of the facilities thus provided for them. While the success of the Post Office Savings Bank has been very considerable, the P. O. Ins. system has so far proved a comparative failure. We shall refer to the alleged causes of this failure presently.

844. *Two opposite views have been urged upon us with respect to the proper relations of the Gov. to the F. Sos.* One, to which we have already referred, points to the withdrawal of all State interference in a matter which, it is said, ought to be left to private management. The other points to the direct assumption by the State of the whole bus. now carried on by the Sos.; or, in other words, to the estab. of a National F. So., managed, and therefore, of course, virtually guaranteed, by the Gov.; insuring all the various classes of benefits now granted by the Sos., whether in the form of sick pay, old age pay, burial money, annuities, or endowments.

This latter view, the Commissioners say, was "strongly put forward by a number of intelligent and philanthropic gentlemen, who have devoted a great deal of their time and thought to the subject of F. Sos.; and is supported by a memorial, numerous and most influentially signed, which has been addressed to us." This memorial we shall review under title of Gov. INS.; but we may briefly notice the scope of the recommendations at this point. The evidence in support of such Gov. intervention offered to the Commissioners was to the effect that such a plan would afford the best means of remedying the evils admitted to exist in certain classes of Sos.; also that the greatly enlarged basis would give a more certain average. The disturbing influence of unhealthy trades and unhealthy neighbourhoods would be less felt. Members moving from one district to another would be able without inconvenience to keep up their insurances. On the other side it was urged that the Gov. ought not to undertake the administration of a sick-pay system, wherein it would be impossible to impose proper protection against imposition; although many of the witnesses thought that the Gov. system of ins. of sums payable at death might be advantageously extended (see p. cxcvii).

At this point there arises, say the Commissioners, a question which deserves consideration—this being no other than whether *all special legis. for F. Sos. can be repealed?* And this is the manner in which they reply to the same:

855. A glance at the hist. of legis. connected with F. Sos. will show that the privileges accorded to them were orig. granted, and the regulations affecting them made under circumstances very different from those of the present day. The various Acts which have been passed for the incorp. and regulation of Joint-Stock Cos.; the Life Assu. Cos. Acts of 1870 and 1871; and the Trades Union Acts, taken in connexion with the changes made in the F. Sos. Acts, have materially modified the value of the latter: inasmuch that a question might now perhaps be raised whether the Sos. could not carry on their bus. almost or quite as efficiently as at present, even although all the special legis. affecting them should be repealed, and they should be left subject to the gen. stat. and common law of the land.

856. Let us then suppose that all the F. Sos. Acts were repealed, and that the office of Registrar was abolished. Let us further suppose that a number of persons desired to combine for the purpose of collecting contributions for the purposes mentioned in the existing Acts, such as burial money, sick pay, and the rest. We apprehend that there would be nothing to hinder their forming themselves into a mut. ins. co. under the Joint-Stock Cos. Act for the attainment of any or all of those purposes—except the ins. of lives of the wives and children of members, from which they would be precluded by the Life Ins. Act of 1774 [14 Geo. III. c. 48, s. 1—see GAMBLING INS.]. Indeed, the framers of the Joint-Stock Cos. Acts themselves appear to have contemplated that some F. Sos. would regis. under it; and the 41th sec. provides a particular form of statement applicable to their case. The form which a So. so regis. itself would take would be that of a co. limited by guarantee and possessing no cap. to start with. It would thus obtain the status of a corp. body, and would not only enjoy all the advantages of a legal character, which it was one of the objects of F. Sos. legis. to confer, but would be free from several of the restrictions which that legis. imposes. *No questions could be raised as to the constitution of Affiliated or quasi-Affiliated Sos., or as to the legality of Dividing Sos.; nor would the freedom of investment be interfered with, as it now is.*

857. The So. would of course be brought under new regulations, some of which would, as they at present stand, be very onerous; but these are to a considerable extent capable of such modifications as would render them not intolerable. The heavy fees charged for the various processes of regis. might be reduced or remitted in the case of Sos. doing bus. within the limits now assigned to F. Sos. Some of the severer penalties might also be modified or dispensed with. We see in short no reason for doubting that it would be possible to put the Joint-Stock Cos. Act into such a shape as would admit of a considerable number of F. Sos. regis. under it.

But then we have to look at the other side of the question, so that the bal. of gain or loss may be fully considered; or, as the Commissioners put it, see what the Sos., and the public, which is largely interested in their good management and success, would lose in point of advantages in their administration, or of security against abuses, by their conversion into Cos.; and this we now proceed to do:

859. We need not lay much stress on the loss of the exemption from Stamp Duties, which, though not wholly unimportant to some of the Sos., cannot be regarded as of any very great value. The loss of the privilege of investing their funds with the Commissioners for the Reduction of the National Debt would be more serious, even at the present rate of int. It would, in some sense, be compensated by the removal of the restrictions now placed upon the investments of the Sos. generally; but it must be borne in mind that though this might often enable the managers of Sos. to turn their funds to more profitable account, it would be the removal of what is intended as a safeguard against improvidence, and that it might in some cases lead to greater insecurity.

860. The privileges of insuring the lives of wives and children without a pecuniary interest in them would, as we have already remarked, be lost by the change. Upon this point we have in the first place to observe that this privilege has already been assumed, without authority, by several Joint-Stock Cos., especially by the *Prudential*; and that the important question has thus been forced upon the notice of the Gov., whether the numerous small pol.-holders in that and other Cos. shall be left exposed to the risk of finding that their pol. are worthless; or whether some alterations shall be made in the law for the purpose of making it legal for a Joint-Stock Co. to carry on the same kind of bus. as does a Burial So., subject, of course, to the same regulations as to the amount insured, the

age of the children on whose lives insurances may be effected, and other matters which may be deemed necessary in the case of those Sos. Should such alterations be made, the right of Family Ins. would cease to be a special privilege of the F. So., and it would lose nothing in this respect by its conversion into a Joint-Stock Co.

861. It must, however, be borne in mind, that if any F. So. which grants benefits on death should convert itself into a Joint-Stock Co., it would become subject to the provisions of the Life Assu. Act of 1870, and would be required to deposit a sum of £20,000 with the Accountant of the Court of Chancery before commencing bus. This requirement would operate as a complete bar to the estab. of new Ins. Cos. on the scale of most of the present F. Sos.; and we must add that we do not see how the difficulty is to be got over if the principles of the Life Assu. Act are to be maintained.

862. Another privilege which the F. So. would lose by becoming a Joint-Stock Co. would be that of enrolling *minors* as members. So many persons under age are now members of F. Sos., and so much inconvenience would result from their exclusion, that it appears essential, that in case of conversion of Sos. into Cos., special provision should be made for allowing them to include minors among their members: though prob. some limitation should be placed on their right of voting at meetings.

There are some other small privileges, more especially the paying of small sums to nominees without administration of effects, summary remedies in cases of fraud, remedies against accounting officers, and arbitration and dissolution clauses; but these ought to obtain in all Acts purporting to regulate Prov. Inst., and would, but for the blind ignorance of legislators. We are of opinion that on the whole it would be of advantage to modify Joint-Stock Cos. legislation, so as to adapt it to the requirements of F. Sos. The conversion would be slow under any circumstances.

The Commissioners next proceed to consider how far the hist. of past legis. throws light "on the problems which have to be solved, and especially upon—1st, that of the character of the machinery to be used in dealing with F. Sos.; 2nd, that of the condition of legal recognition." Under the first head they say:

871. . . . First it [the existing machinery] seems to have failed in bringing more than two-thirds of existing Sos. within the pale of the law (since it is difficult to estimate the unregis. Sos. at less than half the number of the regis.); and, it has failed in bringing up more than a trifle over 56 p.c. of the Sos. which are within the pale of the law to the mark of its simplest requirement, *that of the yearly return*; 3rd, of the number which make this return, over 14 p.c. do not return the number of their members; so that—even assuming those which do not return their funds (a much smaller proportion indeed) to have none at all, and therefore to have made correct returns—*less than one-half of the regis. Sos.*, and less than one-third of the total number, afford to the public the two most elementary and indisputable data as to their condition. Nor is this all. The above figures are derived from the returns of one year only. *But the returns exhibit from year to year wide differences, not to be accounted for by the formation of new and the dissolution of old Sos., or the increase or diminution of funds in the existing ones.* A very considerable number of Sos., as the lists in the Registrar's Reports for 1871 and 1872 will show, fail to make their returns regularly. If the Rep. for 1872 shows a total of £24,727 less funds, but 268,720 more members, than that of 1871, one great cause lies prob. in the irregularity of the returns. To quote a single instance: *the Royal Liver*, which returned £264,795 funds in 1871, without returning the number of its members, does not figure in the list for 1872, although unquestionably alive and flourishing. If that amount were added to the total funds in this year's return (1872), instead of being £24,727 less than last year, they would be £240,068 more; one So. making thus a difference of over a quarter of a million. *This system, then, must also be considered as a failure, so far as its efficient enforcement is concerned.* And who that reflects for a moment on what is expected of the present central machinery can be surprised at such a failure? How is one man in Lond. to keep nearly 22,000 bodies of men in all parts of Eng., in the most remote villages, in the most crowded cities, bodies composed to the most enormous extent of the ignorant and the prejudiced, to a large extent of the obstinate and self-willed, to some extent, it is to be feared, of the self-seeking and dishonest, up to any conceivable standard, however low it may be fixed? Surely, in the presence of the enormous development of the F. So. movement, a purely central machinery must break down.

872. *The only system which the hist. of the movement shows us not to have been yet tried is precisely the one to which the facts of the present time point as a remedy, viz. a local machinery under central control; and we take note of this circumstance, with a view to the recommendations which we are about to submit.*

They proceed to speak thus of the 2nd head, that of the conditions of *legal recognition*:

873. . . . The hist. of F. Sos. exhibits curious varieties of legis. as respects the conditions of legal recognition. By each of the Acts of 1810, 1820, and 1846, Parl. attempted to make such recognition conditional on financial soundness. Each of these Acts was preceded by an inquiry and rep. recommending such a course. By the present Act (of 1855) the attempt was not repeated, although the rep. which preceded that Act did not recommend its abandonment: prob. because the machinery by which it had been sought by the former Acts to affect the object, had from its insufficiency failed. At the present time, if we put aside Sos. not strictly friendly, the law recognizes three separate classes of Sos.—those which merely deposit their rules (a condition practically amounting to open regis.); those which, besides having their rules certified by the Registrar, have also their T. certified by an actuary—the last condition being compulsory, or supposed to be so, on Sos. which grant a certain annuity or superannuation.

874. Now, experience shows that the first and last class of Sos. are exceedingly thin in numbers. The Sos. with deposited rules number in *England* hundreds in the tens of thousands of regis. Sos.; in *Ireland* less than 10 to 1000. As respects Sos. certified by actuaries, Mr. Tompkins tells us that "it is rare to see certificates of actuaries brought into the Registrar's office"; Mr. Neison that "perhaps" 500 Sos. consult an actuary. These facts appear to show, 1st, that open regis. is not attractive to the pop.; 2nd, that actuarial certification cannot be enforced; 3rd, that the present conditions of regis., properly so called, are fairly acceptable to a large majority of the persons wishing to form F. Sos.

On a final review the Commissioners regard the results of the present system as being "in no case satisfactory." The law may be trifled with, or violated with impunity by every class of F. So. But still, with adequate machinery, the law might prob. be rendered efficient. On this important head they remark as follows:

876. In order to improve this state of things, we must consider first the case of the Sos. with deposited rules. Instead of requiring of them a simple deposit of rules once for all, the law might impose on them the same conditions as on Trade Unions, viz. the recording of rules containing certain provisions, and of alterations, a registered office, and annual returns. This would, in effect,

raise this class very nearly to the level of the ordinary F. So., though without any of its privileges, properly so called. On the other hand, to make the new conditions a reality, as well for this class as for the ordinary regis. Sos., *some local machinery would be necessary*, and the law would have to be amended on the points on which it is now evaded. Lastly, if we were to go further, and to require evidence of financial soundness in all or any classes of regis. Sos., we should have to exchange the present fallacious provision respecting the actuary's certificate for a system of T. sanctioned by the State, *the use of which might be either made compulsory on Sos. desiring the full privileges of the law, or might be simply recommended by the authority of the Gov. to Sos. desiring to take a higher rank, and which, for convenience sake, we might call "certified."* With an adequate local machinery it would prob. be possible to insure—1st, that the So. with deposited rules fulfilled the conditions required for an unprivileged legal status; 2nd, that the regis. So. fulfilled the conditions required for a privileged legal status under the existing law; 3rd, that the certified So. worked upon sound bases.

This we regard as a highly important, and, on the whole, a practical suggestion. The Commissioners propound a problem almost naturally resulting from the foregoing:

877. An important and very difficult question, however, here presents itself. Is it desirable to retain 3 or 4 different grades of Sos., subject to different conditions, enjoying different privileges, but all in some sense recognized and even regulated by law? The suggestions to which we have just referred provide for three such grades, and it must be borne in mind that there are, and would prob. continue to be, a large number of other Sos. which would not of their own accord seek regis. in any form, to say nothing of those which might possibly bring themselves under the Joint-Stock Cos. Acts.

At length we reach the vital question—*Is compulsory registration practicable?* And these are the views of the Commission thereon:

878. If the system were now being organized for the first time, we might perhaps recommend the refusal of all legal facilities to, if not the direct prohibition of, all Sos. declining to regis. at all: because we consider that the publicity which regis., when properly regulated, affords is of the highest advantage to the classes for whom the Sos. are intended. *But when we remember that prob. one-third of the existing Sos. are unregis., and bear in mind how long many of them have carried on their bus., and how much alarm and dissatisfaction would be caused by an attempt to enforce the measure upon them, we feel that it is one which cannot be made.* All that we can look to is the education of the public to such a point as may enable them to discern for themselves the importance of obtaining proper information respecting the condition of the Sos. in which they are asked to invest their money, and may induce them to prefer those which give that information in the clear form prescribed by the Gov., to those which withhold it.

For the same reasons as last expressed, the Commissioners think that no line can now safely be drawn between different grades of existing Sos. Their recommendations therefore under this head resolve themselves into the following. 1. *That there be estab. facilities for local regis.;* and in the local registers there should be recorded the names, places of bus., and certain other particulars of Sos. carrying on their operations within the locality: that among such particulars, should be the rules of the Sos. with all amendments therein; a T. of the rates of contributions and benefits, annual accounts showing the number of members, and the receipts and expenditure; a bal.-sheet in a specified form, "and other necessary particulars." 2. *That there should be valuations of the assets and liabilities of all F. Sos., at least once in 5 years.* Details to be lodged with Registrar, or Local Registrars, and that the same "be accessible to the public at very moderate rates of charge." 3. *That (necessarily) there be Deputy, or Local, Registrars,* who might, in add. to their other functions, arbitrate in case of disputes, subject to appeal to the Chief Registrar, or to some legal tribunal. There are other suggestions in this connexion, but these will appear in detail in the final "recommendations" of the Commissioners.

The preceding review has seemed necessary as leading up to a complete understanding of the force of the recommendations which follow; and in this connexion there are still one or two more points to mention in detail, as the subject of "Tables" and "Valuations." Regarding the former the Commissioners say:

892. We desire to draw particular attention to the suggestion which we have made, *that the Gov. should prepare and pub. proper T. of contributions and benefits.*

893. It appears to us that the weak point which is common to all classes of F. Sos., is the *uncertainty which prevails as to the proper rates of prem. which should be charged for the various classes of benefits which they promise.* We have already drawn attention to this subject, and have shown that the inadequacy of the premiums is the cause of embarrassment even to some of the highest and best managed Sos. To many it is the cause not only of embarrassment, but also of insolvency and ruin. Two methods of checking this evil suggest themselves. *Fresh efforts might be made to prepare trustworthy T. adapted to all the various circumstances with which different Sos. have to deal; or recourse might be had, more systematically than at present, to periodical valuations of the assets and liabilities of each So., followed by the necessary corrections of the T. of premiums and benefits.* We believe that both these measures should be adopted. *The Gov. should employ competent actuaries to draw up some model T., which might be commended to the promoters of F. Sos., though their adoption should not be made compulsory.* It would prob. not be long before their value would be recognized; and we may be sure that there would never fail to be persons interested either in existing Sos. or in the welfare of the classes for whose benefit they are intended, who would take the trouble of comparing the T. and rules of particular Sos. with the Gov. standard, and of ascertaining how far they were or were not in accordance with them.

The Commissioners here seem to have overlooked some of the difficulties they have mentioned in Chap. V., as to rates applicable to various occupations. They proceed to speak of the next point in order, viz. *Valuations*, and here their views are particularly sound and practical; at least as to the first part of their proposals:

894. We attach, however, much more importance to properly-conducted periodical valuations, and to corrections made from time to time in the T. according to the results of those valuations, than to the orig. T. themselves; and we consider that such valuations should be made compulsory upon all regis. Sos. Two difficulties at present discourage many Sos. from having recourse to them, though all persons conversant with the subject agree as to their utility and importance. The first difficulty is the costliness of the process; the second the uncertainty of the results arrived at by different actuaries proceeding on different principles. Both these difficulties might be to a great extent, obviated if model forms, not only of T., but also of valuations, were prepared under the

direction of the Gov. With these, and with the aid of well-arranged returns, which the So. would have to furnish, valuations might be conducted cheaply, and on an uniform principle. *Perhaps it would be well that the Gov. should in the case of the first valuation of any So. allow it to call in the services of the Gov. valuer free of charge. For subsequent valuations a small fee should be demanded.*

The Commissioners follow up these suggestions by remarks upon the importance of *proper management*. In truth, this is all-important; and if it could be secured, the greater part of the preceding suggestions would not have been needed. Proper man., which includes efficient man., would secure all these, and more—it would in 9 cases out of 10 secure success! Among the further objects of proper man., they rightly speak of *distinction of funds* for the various benefits as being necessary; it is of the first necessity; and that an *efficient audit* should be enforced; as also that there should be some limitation as to the *investment of the funds*, and as to the nature of the securities; with some other considerations mostly of a minor character. They thought *amalgamation* (except of branches) and transformation into Joint-Stock Cos. should be controlled.

Finally, we arrive at the main "Recommendations" of the Commissioners, which were as follows:

1. That the Registration of F. Sos. should continue.
2. That while regis. should, if practicable, be rendered more easy for the Sos., the requirements of the law should be more strictly enforced upon them, by penalties on officers or otherwise, than they have been hitherto.
3. That in this view a system of local regis. under the control of a central office be adopted, the country being divided into a certain number of regis. districts (either co-extensive with counties or not), with a deputy registrar in each.
4. That the central authority consist of a Chief Registrar in London, with one or more assistant registrars in Lond.
5. That there should be assistant registrars in *Scotland and Ireland*, subordinate to the central authority.
6. That the Chief Registrar should be immediately subordinate to the head of some Gov. Department responsible to Parliament.
7. That a competent actuarial staff be attached to the Registrar's office.
8. That there should be an appeal to the Chief Registrar from the refusal of a deputy registrar to register a So., or from that of an assistant registrar for *Scotland or Ireland* (except on points of Scotch or Irish Law, when the appeal should be to some competent legal tribunal), and from the C. R. himself, on legal points, to a court of law.
9. That while it should be the duty of the Registrar to refuse registration to Sos. which he considers to be formed for illegal purposes, the certificate or acknowledgment of registration should only purport to testify to the fact of compliance with statutory requirements, and not to general conformity of the rules with law.
10. That the Registrar should, at his discretion, give advice to the promoters and managers of F. Sos.
11. That tables of premis. for sickness and death claims should be prepared and pub. from time to time by the Gov. for general information, but that the use of such tables should not be compulsory.
12. That every regis. F. So. should be required to submit its affairs to valuation once at least in every 5 years.
13. That the forms of such valuation should be issued by the Gov.
14. That the first valuation of a So. should be made, if desired, without charge to the So., by some valuer named by the Gov., and subsequent valuations at a small fee.
15. That every valuer's report should be accompanied by an abstract in a form to be prescribed by the Gov.
16. That such valuer's report and abstract should be registered locally with the documents relating to the So., and with such explanatory or additional matters as the central authority may from time to time think fit.
17. That the law should enforce the keeping of accounts in a proper form.
18. That an efficient system of audit should be enforced.
19. That competent public auditors should be appointed and in part paid by the Gov., whose services should be available on fixed and moderate terms, but whose employment should not be compulsory.
20. That annual and quinquennial returns in an improved form or improved forms should be enforced, with penalties for wilful misstatements.
21. That the existing quinquennial returns should be examined with a view to the sifting out of any useful data which they may afford towards the construction of model T.
22. That it should be the duty of the Registrars from time to time to collect from the returns and from other authentic sources, and to popularize and publish information on the statistics of life and sickness in their application to the bus. of F. Sos.
23. That it should be the duty of the Registrars from time to time to pub. in the respective local districts such particulars, founded on the returns and valuation of Sos., as they may deem fit.
24. That Sos. for friendly purposes be not excluded from regis. merely on account of their dividing any part of their funds, if their rules contain satisfactory provision for meeting existing claims before division.

25. That the power to hold land should be extended, so as to enable the Sos. to acquire local offices.
26. That the membership of minors be limited to commence with the age of 16.
27. That provision be made for bringing orphan children within the scope of F. Sos. legis.
28. That the Central Office should have power to grant a certificate conferring incorp. in such cases as it may deem it advisable.
29. That in Sos. composed of a central body with branches, rules giving control to the central body over the branches be allowed to be regis.
30. That the Registrars or deputy registrars be empowered to arbitrate in disputes, on request of both parties.
31. That the power of the Registrars to prosecute be made more effective.
32. That individual members, on behalf of their Sos., be enabled to prosecute officers with the authority of the Central Office.
33. That the Central Office be empowered, on the request of a given number or prescribed proportion of members, to appoint inspectors of accounts, and to call special meetings of Sos.
34. That the amalgamation of Sos., not being branches of the same body, be subjected to special provisions.
35. That the mode of transforming Sos. into joint-stock cos. be regulated.
36. That the proportion of members who may apply for a dissolution by award of the Chief Registrar be reduced.
37. That in addition to his power of dissolving the So., the Chief Registrar should have authority, on the application of a certain number or prescribed proportion of members, to make an award binding on a So. for the adjustment of contributions and benefits.
38. That special provisions be enacted for Sos. receiving contributions in more than one district, otherwise than through other Sos. or branches of Sos. as their agents.
39. That the ins. of the lives of infants under a given age (say 3 years) be prohibited, and that additional precautions be taken with reference to the certificates of their deaths.
40. That the privileges attached to the deposit of rules be withdrawn, but that existing Sos. which have deposited their rules should retain their privileges for a period not exceeding 2 years.
41. That Sos. for charitable purposes taking advantage of the F. Sos. Act should be required to make returns.
42. That friendly or charitable Sos. depositing with the National Debt Commissioners be empowered to make any special returns that may be required through the Registrar, and that the forms of such returns be simplified.
43. That the existing system of Gov. Ins. through the Post Office for death and deferred annuities be extended, *so as to cover the whole ground now occupied by what is termed Industrial Ins.*
44. That the law be amended so as to enable cos. to carry on legally the business of industrial assu. within the same limits and subject to the same restrictions as F. Sos.
45. That the functions of the Registrar of F. Sos. and of the Barrister to certify the rules of Savings Banks be consolidated.
46. That a new F. Sos. Act be passed, consolidating and amending the law in conformity with these recommendations.

The Rep. was signed by all the Commissioners; but Sir M. E. Hicks-Beach, Mr. Richards, Mr. Bircham, and Mr. Pattison stated in a separate Rep. that, in their opinion, the system of regis. recommended was inadequate to meet the necessities of the case, and that more might be done to secure sound T. of prems. and benefits. They suggested that the Registrar should grant discriminating certificates of regis., placing in Class A Sos. certified as having approved rates, while those which merely conform with the law, but whose rates are not approved, would be simply regis. These Commissioners further suggested that incorp., which would be of practical value to the Sos. in various ways, should be conferred on Sos. entitling themselves to be certified as in Class A. It was further suggested that there should be nothing to deter from regis.; and (1) that no new So. should acquire any privilege by the mere deposit of rules; (2) that new Sos. should be admitted to regis. giving a legal status on conditions generally similar to those required of Trades Unions under the Act of 1871, viz. the bringing in of copies of the rules and titles and names of officers, the previous compliance with such regulations respecting registry as may be from time to time in force, the bringing in and subsequent render of accounts and returns in the form from time to time prescribed by the Registrar, and the presence in the rules of such provisions as may be specifically required by the amended law; (3) that existing Sos. having only deposited rules, and existing Sos. certified under the present law, should respectively be at liberty to retain their status and privileges for two years after the passing of the amended law, and should then lose them unless meanwhile they had at least complied with the conditions entitling them to regis. It was suggested also that existing Sos. should be assisted to raise themselves into Class A by being granted, on application, for the two years, gratuitous audit and gratuitous valuation.

These four Commissioners were of opinion that the result secured would be that all Sos. would be divided, in a manner generally apparent and easy of apprehension, into two

classes—Sos. presumably sound (being in class A), and Sos. as to the soundness of which nothing had been ascertained. Mr. Bircham and Mr. Roundell held that even unregis. Sos. should have efficient remedies in case of fraud; and Mr. Bircham suggested that the Registrars should be entitled to require from unregis. Sos. information as to their condition, and to supply suitable suggestions to them for the improvement of their condition, and with a view to bring them into regis.

The Commissioners award thanks (*inter alia*) to Mr. Brabrook, Assistant Registrar of F. Sos., and Mr. Tompkins, Chief Clerk, from whom they had received "most valuable information"; to Mr. F. G. P. Neison and Mr. Ratcliffe in particular, as among the witnesses who "have supplied us with a great amount of interesting and valuable matter, throwing light upon the subject of our inquiries"; to Mr. A. B. Adlard, of the *Law Life Assu.* Office, who had been employed by the Commissioners "to check the numerical statements"; to the Assistant Commissioners, "whose separate reports will sufficiently show the zeal and ability with which they have discharged their task." Lastly, "We desire to record our very strong sense of the important services rendered, not so much to ourselves as the public, by our Sec., Mr. J. M. Ludlow, who has throughout the proceedings taken by far the largest share of the labour of the Commission, and but for whose devotion to the work we should have felt ourselves unable to deal in a comprehensive manner with the numerous and complicated questions which have presented themselves to us." The "candid and friendly spirit" in which the Commissioners had "generally been received" by the officers and managers of the Sos. whose affairs were examined is also acknowledged. The Commission examined 277 witnesses; several of them more than once.

In the "Appendix" to this 4th Rep. (Part I., and continued in Part II.) is contained a valuable series of papers, which we enumerate for purposes of future reference:

1. Legislation and Parl. Inquiries relating to F. Sos., and other Sos. with which the Registrar is connected. By the Sec. of the Commission (p. 1).
2. Statement of the existing Statute Law relating to F. Sos., and other bodies, to which the functions of the Registrar relate. By the Sec. of the Commission (p. 22).
3. Bill to Amend the Law relating to F. Sos., brought in by the Chancellor of the Exchequer, and ordered to be printed 10th Feb. 1870 (p. 70).
4. Some Statistics of F. Sos. for E. and W., with special reference to those of Lancashire. By the Sec. of the Commission (p. 73).
5. Odd Fellows United Action Committee (p. 79).
6. Suggestions from F. Sos. in Scotland as to amendment of the Law (p. 82).
7. Replies from Coroners in Eng. and Ireland, and Procurators Fiscal in Scotland, as to the Influence of Burial Sos. on Infant and Adult Mort. (p. 85).
8. The "Ebenezer" Lodge of Independent Druids (unregistered) (p. 110).
9. Memorial on Government Ins. (p. 112).
10. Letter from W. R. Malcolm, Esq., Assistant Sec. to the Board of Trade [as to changes in regard to F. Sos.] (p. 115).
11. Duties of the Registrar of F. Sos. which do *not* relate to F. or Benefit Building Sos. By E. W. Brabrook, Assistant Registrar (p. 116).
12. Digest of Replies to Questions forwarded to Loan Sos., Industrial and Provident Sos., and Trades Unions (p. 124).
13. Returns from Boards of Guardians [as to number of paupers who have been members of F. Sos.] (Part II. p. 1).
14. Book-keeping for Burial Sos. By Alexander Forbes (p. 39).
15. Letter on Burial Sos. By Mr. Alexander Forbes (p. 46).
16. Rules of F. Sos. in Eng. and Scot. Selected and Edited by E. L. Daniell, Esq. (pp. 47-428).

The entire literature of this Commission consists of First Rep. 1 vol. 1871; Second Rep. in 3 parts, 1872; Third Rep. 1 vol. 1873; Fourth Rep. 2 parts, 1874; and same year the 4 vols. of Reports of Assistant Commissioners; making a total of 11 vols. *fo.*, the value of which is greatly enhanced, for practical use, by the most excellent Indexes furnished. The General Index is contained in Part II. of 4th Rep.

We have endeavoured to treat the Reports of this Commission exhaustively (but of course in a very condensed form), from a feeling that out of it, and the legislation which has followed it, there has been created a new epoch in regard to F. Sos. Whether this will prove to be for their good remains to be seen. Legislation so often proves but an aggregation of incompetence and ignorance, blighting, withering, or even destroying, that which it seeks to protect, that we have but small faith in it. In so far as it has placed wise and experienced men to regulate these and kindred Asso., good must result. We have to carry on our survey into 1875, when legislation followed; into 1876, for the Rep. of the Actuarial Commission; and into 1877, for the 1st complete Rep. of the new Chief Registrar, in order properly to estimate the preliminary results.

A Bill was introduced into Parl. this Session (in pursuance of a para. in the Queen's Speech) to consolidate and amend the law relating to F. Sos.; but as it was afterwards withdrawn, in favour of a more comprehensive measure to be introduced by the Gov.

next session, we do not dwell upon it now. It indeed comes before us in several forms in connexion with the events of the year.

A revised Bill, of a very inefficient character, had also been introduced, purporting to be in the interest of F. Sos.

On the withdrawal of the Gov. Bill, or rather in view of such withdrawal, the *Prudential Co.* had sought to introduce a measure of its own, to meet the point raised in the Rep. of the Commission respecting the want of interest of parents in the sums insured on their children's lives. The Chancellor of the Exchequer (Sir Stafford Northcote) promised that a clause should be introduced into the new measure to meet the case; it was therefore unnecessary to introduce a Bill for this specific purpose. [PRUDENTIAL ASSU. CO.]

A Conference of Trades Unions was held in Lond. in Sept., and passed resolutions objecting to be dealt with by Parl. in connexion with F. Sos.

At the Social Science Congress held at Glasgow this year Mr. J. M. Ludlow (late Sec. to Royal Commission) read a paper on *Cos. and Sos., with Special Reference to the F. Sos. Bill of the last Session.* After showing the extreme complexity of the present statutory law of asso., which he believed exceeded in bulk the whole of the French *Code Civile*, he said that the F. Sos. Bill of this year was an attempt to introduce order into a portion of this chaos by bringing into one law all the different bodies (with two exceptions) registered or certified by the Regis. of F. Sos., either as such or as Barrister to certify savings banks. It failed through the shortsighted or selfish opposition of the classes concerned. The revised Bill, except for the purpose of uniting the offices of Registrar and Barrister to revise the rules of F. Sos., only dealt with the classes of Sos. hitherto dealt with by the F. Sos. Acts proper, together with the Cattle Ins. Sos. Act, which embodied the former as a whole with its own provisions. The result of this was to leave nearly 100 superfluous sections on the Statute-book. He trusted that when the subject was better understood, the advisability of legis. of at least as comprehensive a scope as the original Bill would be felt. After showing that the scheme of the cos. agents was very ill adapted to various classes of bodies, he concluded with the following propositions:—1. The essential foundation of a rational English law of asso. was the legal recognition and regis. of the form or title of the asso. 2. The right of asso. beyond a certain number under the corporate form with limited liability for all should be allowed under conditions sufficient to insure that the capital can be reached when required both by creditors and members. 3. In both the above cases the regis. should be with a Board of Trade department, where the register might hereafter be enlarged into a general commercial register analogous to those of France and Germany, or with some provincial branch of it. 4. The same department should carry through all formal stages bodies requiring Parl. powers, leaving if possible nothing for Parl. to determine but whether their objects are such as to justify the grant of such powers. 5. Where the objects of asso. involve certain possible conditions of membership, or exclude individual gain, or limit pretty narrowly the interests or benefits of members, and perhaps in all cases of human ins. (using the word as excluding ins. against damage to material objects or to merely animal life), recourse should be allowed to a board or officer answering to the Registrar of F. Sos., but endowed with more flexible powers, including that of discretionary incorp. where the law should not make it imperative, or to some provincial branch of such board or deputy of such officer. 6. The right of special incorp. by Parl. or by the Crown should remain untouched, but all enactments authorizing incorp. with lim. liability should be repealed. A brief discussion followed, in which Mr. Brabrook, Mr. Strachan (of Newcastle), Mr. Malcolm (Sec. of the Associated Council of Friendly Sos.), Mr. Daniel, Q.C., and Mr. Webster, Q.C., took part.

Mr. Charles Cameron, M.D., LL.D., M.P., read a paper before the same Congress: *What Legislation should follow the Rep. of the Commission on F. Sos.?* This was a fairly reasoned out paper; but calls for no special notice here.

The Hon. Lyulph Stanley (late one of the Assistant Commissioners) read an able paper on the same question.

Mr. J. M. Ludlow read a further paper: *On the Different Modes of State Aid to Private Undertakings, and in particular to F. and other Sos.* He said there was no more difficult question in social economy than that of the extent and nature of the help that may be given by the State to private undertakings, especially to associated bodies. He enumerated the following forms of possible State help: 1. Advice, whether in special cases or generally. 2. Legal security. 3. Special remedies against wrong-doing. 4. Special remedies in disputes. 5. Aid in management. 6. Privileges against individuals. 7. Fiscal exemptions. 8. Direct pecuniary aid. Each of these were carefully examined in their various bearings.

Mr. Geo. Potter read a paper on the same subject, wherein he dwelt upon one cardinal point in regard to all great movements in which working men were largely concerned—namely, that interference by Gov. or Parl. action, *except to remove obstacles out of the way*, was a great mistake.

The Gov. Bill (as amended in Committee) was issued towards the end of the year; and very soon afterwards a deputation from the *Hearts of Oak Benefit So.* waited upon the Chancellor of the Exchequer, objecting to some of its provisions.

The [19th] Ann. Rep. of the Registrar of F. Sos. in E. and W. issued this year brought up the returns to the close of the preceding one. Among the 95 Sos. reported in it as having been dissolved by adv., award, agreement, or notice to Regis., were the following: *Royal Naval Reserved Fund*, Merc. Marine Office (Sunderland); founded 1867; no details. *Queen Elizabeth's Benevolent* (Bristol); founded 1870; members 60; funds £63. *L'Alliance Fraternelle* (Guernsey); founded 1845; members 49; funds £245. *Farriers Horse Shoe Fund* (Golden Square); founded 1847; members 108; funds £34. [1847.]

Stamp and Tax Office Assu. Co. (Somerset House); founded 1839; members 85; funds not stated.

Economical Reform Benefit (Walton, Suffolk); founded 1854; mem. 180; funds £1090.

True Blue F. (Sutton, Surrey); founded 1850; members 36; funds £240.

Court Gigantes [Foresters] (Sedlescombe, Sussex); founded 1865; members 61; funds not stated.

Midland Counties Prov. and Life Assu. Inst. (Birmingham); founded 1846; members 33; funds £680.

St. Gwendoline Benefit (Talgarth, Brecon); founded 1845; members 59; funds £470.

South Derbyshire Miners Accident F. (Newall); no details.

Wear Steam Packet F. So. (Sunderland); no details.

Pride of Gt. Bardfield (Essex); no details.

Seaman's F. So. (Southampton); no details.

Cheva Bekra Cholum So. (Hebrew School Room, Liverpool); no details.

Forest Vale Consolidated Miners Inst. (Swannington, Leicester).

So. of Miners (Crown and Cushion Inn, Ocker Hill, Tipton, Stafford); no details.

Driffield Branch Prim. Meth. Prov. Inst. (North Frodingham, Yorkshire); no details.

Confidential Brothers F. (Beaufort Iron Works, Llangattock, Brecon).

The Sos. dissolved by award embraced the *Castle Eden So.*, founded 1793. The funds (£2971) were divided among the 139 members—whose ages ranged from 31 to 84, and of whom 84 were annuitants—on a careful estimate of each member's interest. Also the *Church Lawford F.* (estab. 1800), with 22 members and only £51 funds. The *Hope F.* (estab. in Lond. 1808), now having 45 members and £758 funds (decreased from £1654 in 1866); and some others—6 in all. The aid of the Registrar in these dissolutions had been alike economic, equitable, and speedy.

The dissolutions by agreement were 3—The *Female Benefit* (Stockton-on-Tees), estab. 1800, and now having 25 members and £1393 funds. The *Female F.* (Norton); founded 1807; members 37; funds £1017. The *Christian Fund* or *F. So.* (Baptist Chapel, Wisbeach); members 117; funds £1060. In each of these cases the funds were apportioned by the Registrar.

Forms of Ann. Returns (slightly altered from those of previous years) were sent out to 21,659 F. Sos., of which 11,926 were received filled up. Among the returns received was one from *Court Rambler* (regis. in Eng. as a branch of the *Foresters*), from the Ghoorpora Barracks, Poona, East Indies—the regiment to which the members belong (7th Royal Fusiliers) having been ordered on service there. The number of the members was now 66; the funds £93. The *sickness* for the year had been 15 members, for 411 days. [See 1876.]

As a specimen of the information asked for and obtained in the Ann. Returns now sent out, we may take the following relating to *Buckinghamshire*. To the Sos. in this County 186 forms were issued; 92 Returns were received (being the same number as in 1872), of which 63 (an unusual proportion) were on the forms sent out by the Registrar. To the question "Whether the treasurer had given security?" 20 Sos. answered "Yes," and 14 "No." To that "Whether the So. had a copy of the F. Sos. Acts?" 10 Sos. answered "Yes," and 20 "No." The answers to the other questions are tabulated in the following statement:

Class of Society,	No. of Sos.	No. of Members at the end of 1873.	No. dying during the Year.	New Members joining during the Year.	No. Withdrawn or Excluded during the Year.	No. of Members Sick during the Year.	No. of days' sickness.	Average days' Sickness to each Mem. of the So.	Average days' Sickness to each Member Sick.
1. County So.	1	898	10	39	29	245	17,284	19	71
2. Local F. Sos.	36	2500	16	109	104	538	20,641	8	38
3. Branches of Affiliated Orders	12	1590	17	154	43	326	14,408	9	44
Total of Sos. in the Co. of Bucks answering the Registrar's questions.	49	4988	43	302	176	1109	52,333	10	47

There were no "Burial Sos." (*i.e.* Sos. for burials only) returned as belonging to this county. The Regis. remarks on the foregoing:

The returns for this county are singularly favourable to the small Local F. Sos. These average less than 70 members each, and in no case exceed 275. Indeed, if the single So. which has so many as 275 members were excluded, the average days' sickness to each member in the small Local Sos. would be reduced to 7, and the average to each member sick to 36. It will be seen that a County So., having agents in several of the towns in the county, is quoted as having a very high average of sickness. It may be proper to explain, however, that the So. in question is one of long standing, having nearly £14,000 invested; and that the rate of sickness, high as it is, is stated to be "lighter than usual." It does not follow, from the average rate being high, that it is more than should be expected, having regard to the age of the members.

For the county of *Cumberland* a similarly compiled T. is given, and here it is seen that the average number of days' sickness to the whole of the members is 12, instead of 10, as in *Buckinghamshire*. The Registrar says hereon:

The excess of sickness in this county over the usual average is contributed to in a great measure by the unfavourable experience of a single So., consisting of 221 members, of whom 48 have been claimants on the sick fund for the great number of 11,653 days—the So. having paid during the year in sick pay £325 to 29 members, at 4s. 6d. p. week, and to 19 members at 3s. 6d. p. week. The experience of this So. is therefore 53 days' sickness p. member, and 243 days for every member sick. The So. in question has invested property, returned as worth £870, but it has had to borrow £515, at 4½ p.c. int., leaving its net funds only £355; and the Sec. remarks, "that it is quite clear that unless the lead mines flourish again, the funds will run out in a few years." The ann. income from the payment of members is only £181.

It is by such careful analysis and watchfulness of the returns of the several counties, and of the experience and position of particular Sos. in them, that much good may be done; and this in proportion to the completeness of the returns sent in. By way of throwing some light on the proportion of *Local* or "native" Sos. in the various counties, we propose to quote a T. prepared by Mr. Brabrook and included in his paper read in 1875.

From the Rep. of the Registrar of F. Sos. in *Scotland*, issued this year, we draw the following details: 60 new F. Sos. were regis., and 62 Sos. received certificates of alteration of rules, making a total of 122 certificates. Two Sos. were dissolved by agreement, one So. was dissolved by award of the Registrar, and four sent notices of dissolution to the Regis. by letter. Forms for the ann. return required by stat. were issued to 738 Sos., and replies, either in the shape of the form issued, or in that of the So.'s Ann. Rep., were received from 427 Sos.; from 10 Sos. replies were received, to the effect that they had been dissolved, and in the cases of 92 Sos. the forms sent out were returned through the Dead Letter Office. An application was made by a So. of *Good Templars* for regis., but this was refused, on the ground that the purposes of the So., viz. "The promotion and diffusion of temperance principles," did not fall within the scope of the objects for which F. Sos. might be estab.! Such is the narrowness of official comprehension. The So. very properly threatened to appeal.

Mr. William Hatton, Actuary, pub.: *A Treatise on F. Sos., with T. constructed from the Sickness and Mort. experienced by Members of the Manchester Unity of Odd Fellows in passing through 1,321,048 Years of Life, being the largest experience hitherto collected of F. Sos. in the U.K.* All the more material portions of the pamph. are based upon the results given in Mr. Ratcliffe's *Supplemental Rep.* 1872.

In Nov. this year Mr. Marcus N. Adler, M.A., delivered a lecture to the Jewish working men on "Friendly and Benefit Sos." The lecturer pointed out the distinction between the "Hebras"—Benevolent Sos., for the use of those too poor to contribute to F. Sos., and which perform duties in regard to nursing, watching, and burial of the dead, being still known under their common designation of "Winding Sheet Societies"—and F. Sos. intended to be self-supporting. Of the latter there were now some 50 Sos. in existence among the Jews in the U.K.; these had about 2200 members; in add. there were about 1000 members of Female Sos. Again, there were about 700 in the Jewish Courts of the Order of Foresters; about 800 (say 300 heads of families) belonging to the Medical Aid So.; 500 to Trade Sos.; and about 500 to F. Sos. not exclusively Jewish, as the Royal Liver So., and the non-Jewish Courts of the Odd Fellows and Foresters. In all about 8000.

There was estab. the *Metropolitan Jewish Confinement, Mourning and Burial So.*, which at the end of 1875 had enrolled 494 members, and had funds in hand £276.

1875.—One of the first measures intro. to Parl. this year was the amended F. Sos. Bill, which stood over from last Session. The Chancellor of the Exchequer introduced the measure with great moderation and good taste. His concluding para. was: "I hope we shall be able to pass this measure, for it seems to me one which would be of great advantage to the classes for whose benefit it is designed. It has been framed, as I have shown, with no desire to interfere restrictively with the operations of these societies, but on the contrary to facilitate and advance them." At a later stage in the consideration of the measure Colonel Barttelot moved "that no legislation with regard to F. Sos. can be deemed satisfactory which does not provide in some way for compulsory registration and audit and for the gradual introduction in all cases of a properly calculated scale of contributions." He said "that any measure dealing with such great interests should be stronger than the Bill now before the House, or the question should be left alone. He thought the Chancellor of the Exchequer had been more or less 'sat upon' by the

great Sos., and had thus left entirely out of view the case of the smaller Sos. The debate on the second reading was a weak and half-hearted debate, but as far as it went it tended to show that something should be done by legis. to put a stop to the frauds now practised on the working-classes in connexion with those Sos.," and so on.

On the motion for the second reading in the Ho. of Lords, Earl Beauchamp made an effective and well-timed speech; acknowledging the difficulties of the position, and explaining how the Gov. had proposed to deal with these. The Earl of Morley considered the question of audit the keystone on which the Bill rested. A large number of F. Sos. were perfectly sound, but in respect of many others there was defect of management and default in furnishing proper tables, and this latter very important matter could only be remedied by an annual and an efficient audit.

Outside the walls of Parl. the Bill received much attention. There was a Conference at the rooms of the Social Science Asso. extending over two evenings, with Lord Rosebery in the chair, when the views of the working men as expressed by their paid "agitation" delegates were considered.

At almost the last stage of the Bill in the House of Lords, Lord Aberdare carried an amendment to reduce the sum payable on the death of any child to £3—at which amount it had orig. stood in the Bill as introduced by the Gov., but continued pressure had worked it up to £6. The Congress of F. Sos. thereupon met at Storey's Gate, and discussed this amendment—intimating their strong determination to oppose it. The House of Commons finally rejected the amendment, on the ground that £3 would not in all cases cover the *bonâ fide* medical and funeral expenses. And so the measure, which had practically engaged the attention of Parl. for 5 years, became law. We now proceed to review its provisions.

The 38 & 39 Vict. c. 60—*An Act to consolidate and amend the Law relating to Friendly and other Sos.*—reciting the expediency, proceeds to enact that immediately as to secs. 10, 37 and 38; and on 1st Jan. 1876, as to the remainder of the measure, the Acts and parts of Acts set forth in the 1st schedule be repealed (s. 5). By s. 6, "Every So. now subsisting whose rules have been regis., enrolled, or certified, under any Act relating to F. Sos. or Cattle Ins. Sos., should be deemed to be a So. regis. under this Act, and this, notwithstanding that the contingent ann. payments to members in such Sos. as were estab. before 15th August, 1850, exceed the limits allowed under this Act. Sos. with deposited rules under the Act of 1855 to remain protected under its provisions until enrolled under this Act, or otherwise until 31st Dec. 1878 (s. 7). The following Sos. might be regis. under this Act (s. 8), viz.:

- (1) Sos. (herein called F. Sos.) estab. to provide by voluntary subs. of the members thereof, with or without the aid of donations—
 - For the relief or maintenance of their members, their husbands, wives, children, fathers, mothers, brothers or sisters, nephews or nieces, or wards, being orphans, during sickness or other infirmity, whether bodily or mental, in old age (which shall mean any age after 50) or in widowhood, or for the relief or maintenance of the orphan children of members during minority;
 - For insuring money to be paid on the birth of a member's child, or on the death of a member, or for the funeral expenses of the husband, wife, or child of a member, or of the widow of a deceased member, or, as respects persons of the Jewish persuasion, for the payment of a sum of money during the period of confined mourning;
 - For the relief or maintenance of the members when on *travel in search of employment*, or when in *distressed circumstances*, or in case of *shipwreck*, or damage or loss of boats or nets;
 - For the endowment of members or nominees of members at any age;
 - For the ins. against *Fire*, to any amount not exceeding £15, of the tools or implements of the trade or calling of the member;
 - Provided that no So. (except as aforesaid) which contracts with any person for the assu. of an annuity exceeding £50 p.a., or of a gross sum exceeding £200, shall be regis. under this Act.
- (2) Sos. (herein called Cattle Ins. Sos.) for the ins. of any amount against loss by death of neat cattle, sheep, lambs, swine, and horses from disease or otherwise;
- (3) Sos. for any benevolent or charitable purpose (herein called Benevolent Sos.);
- (4) Sos. (herein called Working Men's Clubs) for purposes of social intercourse, mutual helpfulness, mental and moral improvement, and recreation;
- (5) Sos. for any purpose which the Treasury may authorize as a purpose to which the powers and facilities of this Act ought to be extended (herein called Specially Authorized Sos.).

These last may be limited as to the use of the provisions of this Act (9).

Sec. 10 provides a Registry Office for F. Sos., and defines the duties of the Chief and Assistant Registrars, of which last there might be one for Eng. and one for *Scotland and Ireland* respectively. Among the duties of the "Central" Office, but subject to the approval of the Treasury, is the preparation of model forms of account, the circulation of information, and the construction of T. The Chief Regis. is to rep. yearly to Parl. No

Assistant Regis. for *Scotland* or *Ireland* shall refuse to record any rules or amendments of rules which have been regis. by the Central Office.

Sec. 11 deals with registry of Sos., and enacts the following regulations: 1. "No So. can be regis. under this Act which does not consist of 7 persons at least." 2. The application for registry must be made by 7 members and Sec., and accompanied by written or printed copies of rules, with name of Sec. and Trustees or other officer authorized to sue. 3. No So. to be regis. with identical or deceptive similarity of name to any existing So. 4. "Dividing" Sos. may regis. 5. Sos. granting annuities to have T. certified by actuary of not less than 5 years' standing. 6. Sos. intending to carry on bus. in more than one country are to regis. first where their head office is to be located, and then copies of rules, and alterations of rules, are to be deposited in each of the other countries [as *Scotland* or *Ireland*]. 7. Registrar to issue acknowledgment of registry. 8. Appeals from refusal to regis. to be made to Superior Courts herein named. 9. If refusal be overruled, acknowledgment of registry to be issued. 10. This "acknowledgment" conclusive evidence of registry.

Sec. 12 deals with cancelling or suspension of registry. This may be by Chief Regis. in *England* or Assistant Registrars in *Scot.* and *Ireland*, at request of So., or on proof of having been obtained by fraud, or in other cases with approval of Treasury, not less than two months' notice of cancelling or suspension to be given in *Gazette*, etc. Right of appeal; but during suspension bus. operations to cease.

Sec. 13 deals with rules and amendments. Every set of rules sent in for regis. to contain such provisions (according to its class) as are contained in 2nd schedule to Act. Amendments to be regis., and on refusal to regis., right of appeal. Acknowledgment of regis. of alteration of rules to be issued. Copies of rules to be issued by So. to any person on demand, on payment not exceeding 1s. Delivery of untrue rules a misdemeanor.

Sec. 14 embodies duties and obligations of Regis. Sos. They must have regis. office; appoint trustees; and once at least in every year submit their accounts for audit, either to one of the public auditors appointed under this Act, or to two or more auditors appointed under the rules. Also to send to Regis. every year before 30 June copy of the audited account up to preceding 31 Dec. Within 6 months after 31 Dec. 1875, and within a like period after every succeeding 5 years, send in quinquennial return of sickness and mort. experience. Also within 5 years after commencement of this Act, or the registry of the Sos., and within 6 months after termination of each subsequent 5 years, have a valuation of the affairs made by an actuary, and send signed copy of same, with the name, address, and profession of such valuer, to the Registrar. Chief Registrar to have same re-valued, and send copy of valuation to So. To allow inspection of books to any one "interested" in So. Supply a copy of ann. bal.-sheet to any member, or other person interested. Require certificate of death before paying any sum of money due on such contingency. Penalty for offences. Offence of So. to be regarded as offence by officers. Returns to be in prescribed forms. All documents sent to Registrar under this sec. to be recorded with rules. Valuation may be dispensed with in Sos. whose operations are not applicable to it.

Sec. 15 enacts the "privileges" attaching to regis. Sos., viz. "corresponding Acts" not to apply. Exemption from stamp duties. Power of "nomination" for sums not exceeding £50. Distribution of sums not exceeding £50 without letters of administration. Payments to persons apparently entitled thereto to be held valid. In absence of trustees, Regis. may order trans. of stock. Priority of claim in case of death or bankruptcy of officer. Membership of minors, as to F. Sos. under 16 years. Sos. consisting wholly of members between 3 and 16 years may regis. under this Act, "subject to such regulation as may be made in that behalf." And as to existing regis. Sos., no rule as to admission of members under 16 to be deemed contrary to this Act. No charge for certificate of birth or death required under this Act to exceed 1s. Sos. may subs. to hospitals, infirmaries, etc., where necessary to secure benefits to members.

Sec. 16 regulates property and funds of Sos. Trustees, with consent of committee of man. or majority of members, may invest in Post Office Savings Banks, or any Savings Banks certified under Act of 1863; also with National Debt Commissioners; also in purchase of land, or erection or alteration of office or buildings thereon; and upon other security, not being personal. Property of So. vested in trustees. Death and change of trustee, discharge of mortgages, etc. Punishment of fraud or misappropriation. Trustees not personally liable.

Sec. 17 regulates investments with National Debt Commissioners; and sec. 18 *Loans to members*, which may be made on pol. of ins. up to half amount insured, on proper security being given; or loan may be made out of separate loan fund. Sec. 19 provides for accumulating to surplus contributions for the member's use.

Sec. 20 relates to officers in receipt or charge of money: must give security and account. Sec. 21 relates to legal proceedings. Sec. 22 as to disputes; these to be settled as provided in rules, with appeal to County Courts. Where not expressly forbidden by rules, Chief Registrar in *Eng.* and Assistant Registrars in *Scot.* and *Ireland* may settle disputes, or state special case for opinion of Superior Court.

Sec. 23 confers special powers on Registrars, to be exercised on application from members. Upon the application of one-fifth of the members of a regis. So., or of 100 members in the case of a So. of 1000 and not exceeding 10,000 members, or of 500 members in the case of a So. with more than 10,000 members, the Chief or Assistant Registrars (with consent of Treasury) may appoint Inspectors to examine into affairs, or may call a special meeting of members. Applications under this sec. to be supported by evidence, and applicants may be called upon to give security for costs, or to defray same: or they may be defrayed out of funds of So. "This sec. shall not apply to a So. with branches unless with the consent of the central body of such So."

Sec. 24 relates to special resolutions by regis. Sos., and the proceedings which may be taken by virtue thereof. A special resolution must be carried by not less than three-fourths of the members entitled to vote, after proper notice. It may *change name* of So.; authorize *amalgamation* of two or more Sos., with or without dissolution and division of funds; or convert *Sos. into Cos.*, but not interfere with rights of creditors. Special resolutions to be registered; and may in certain cases operate as a Memorandum of Asso. for new Co. The regis. of So. under this Act to become void on regis. as a Co. Proviso, that in case of amalg. of F. Sos., five-sixths of members (in value of their interest as calculated for dissolution) shall assent; and also as to some other details. "This sec. shall not apply to branches."

Sec. 25 deals with "Dissolution" of Sos., which in F. Sos. may be made with assent of five-sixths in value of members (including hon. members if any); also under award of Registrar or Assistant Registrar in certain cases; also by agreement in writing. Notice to be given in *Gazette*, etc. These powers not to apply to Sos. having branches, without consent of central body.

By sec. 26 militiamen and volunteers are not to lose benefits in F. Sos. by reason of enrolment in these services.

Sec. 27 recurs to limitation of benefits to be granted by enrolled Sos., viz. £200 and *bonus additions* thereto on death, and not exceeding £50 annuity. Declaration may be required, and false declaration a misdemeanor. Proviso in favour of previously regis. Sos. as in sec. 6.

Sec. 28 applies to payments on the *death of children*. No sum or sums payable on death of a child under 5 years to exceed £6, or under 10 years £10. Who may receive payment defined. On the certificate of death the Registrar of Deaths is to write the name of the So. to which it is to be produced; and no certificate to be issued at all unless cause of death shall have been duly regis. On certificate being presented in view of payment on death of child, officer of So. to inquire what has been previously paid in respect of such death. [INFANT MORT.] There are penalties for offences under this sec. The following sub-secs. are also important:

7. The word "So." in the present sec. shall include all *Industrial Assu. Cos.* assuring the *payment of money on the death of children under 10 years of age*.

8. No assu. made or to be made by any Industrial Assu. Co. of a sum of money payable on the death of a child under the age of 10 years, which would be valid if effected with a regis. So., shall be invalidated by reason of any provision contained in the Act of 14th of his late M. Geo. III. c. 48, for regulating ins. upon lives, and for prohibiting all such ins. except in cases where the person insuring shall have an interest in the life of the person insured.

9. Provided that nothing in this sec. contained shall apply to ins. on the lives of children of any age, where the person insuring has an interest in the life of the person insured, or to existing contracts.

Sec. 29 applies only to *Sos. having branches* [usually designated *Affiliated Sos.*]. Application for registry is to be accompanied with list of every branch, and of the place where the same is estab. A So. having a fund under the control of a central body, to which every branch is bound to contribute, may be regis. as a single So. Notice of estab. of new branches to be given. Where branches do not contribute to central fund, each must be regis. separately.

Sec. 30 applies to "Collecting" Sos. Members are to receive copies of rules and pol. on payment of *1d.* Notice to be given to members before forfeiture. No trans. of pol. (except in case of amalg. or transfer, as previously provided) to be made without consent of member in writing, or in case of infants, of parent or guardian. This provision to apply to all Sos. whether regis. or unregis., and to Industrial Ins. Cos. No collector to be a member of the committee of man. or to vote. General meeting to be held every year, and where not definitely fixed by rules, notice to be given. Bal-sheet to be kept for inspection at each place of bus. 7 days before meeting, and copy to be delivered or sent, prepaid, on demand; same to be certified by professional accountant. Disputes to be settled at County Court of district where member resides. Notices may be sent by post. Offences under this sec. detailed. Provisions of this sec. to be embodied in rules of Sos. of this class.

Sec. 31 applies to Sos. for *Ins. of Cattle*, and to certain other Sos.; sec. 32 lays down general regulations regarding *penalties* under this Act; sec. 33 relates to summary procedure and appeals; sec. 34 to proceedings in *County Courts*.

Sec. 35 relates to *Public Auditors and Valuers*, and is important. We give it *in extenso*:

The Treasury may from time to time appoint public auditors and valuers for the purposes of this

Act, and may determine from time to time the rates of remuneration to be paid by Soss. for the service of such auditors and valuers; but the employment of such auditors and valuers is not compulsory in any So.

Sec. 36 gives the Treasury power to determine scale of *Fees* to be paid for matters to be transacted, or for the *Inspection of Documents*, under this Act; "but no fees shall be payable on the registry of any F. So., Benevolent, or Cattle Ins. So., or Working Men's Club, or of any amendment of the rules of the same." All fees to be paid into H. M. Exchequer.

Sec. 37 provides for payment of Registrar, etc., and expenses of carrying out the provisions of the Act, by the Treasury. Sec. 38 empowers the Treasury to make Regulations for carrying Act into effect, but all such regulations are to be submitted to Parl. Sec. 39 relates to *Evidence of Documents*. Secs. 40 and 41 extend the Act to the *Isle of Man* and the *Channel Islands*.

Under the 1st Schedule the following Acts are repealed, wholly or in part, as mentioned in each case: 1812 [52 Geo. III. c. 38, s. 41; and c. 68, s. 39 (Militia Acts)]; 1854 [17 & 18 Vict. c. 105, s. 44; c. 106, s. 69; c. 107, s. 27 (Militia Acts)]; 1855 [18 & 19 Vict. c. 63, wholly]; 1858 (wholly); 1859 (s. 23); 1860 [23 Vict. c. 13, wholly (Yeomanry and Volunteer)]; 23 & 24 Vict. c. 58, wholly]; 1863 [26 & 27 Vict. c. 65, s. 44]; 1866 [29 Vict. c. 34 (Cattle), wholly]; 1873 [36 & 37 Vict. c. 77, s. 33].

Under Schedule 2, the requirements to be contained in the rules of every new So. to be regis. (pursuant to sec. 13) are enumerated. These are (briefly): 1. Name and place. 2. Entire objects. 3. Meetings, votes, making and altering rules. 4. Appointment and removal of committee and officers, and conditions under which a branch may secede. 5. Investment of funds, accounts, and audit. 6. Ann. Returns to Registrar. 7. Inspection of books. 8. Disputes, mode of settling. 9. In Dividing Soss., providing for all claims before division.

In the case of F. and Cattle Ins. Cos., special provisions, viz.: 1. Keeping separate accounts for each benefit. 2. F. Soss., return of mort. and sickness every 5 years [why not for Cattle Ins. Soss.?]. 3. F. Soss., valuation every 5 years. 4. For voluntary dissolution. 5. Provision for investigation into affairs of So. by members.

The 3rd Schedule consists of forms of bonds, etc. The 4th gives form of "Acknowledgment of Registry," under seal of office; but no longer stated as being "in conformity with law."

We have given this full abstract of the preceding measure, not simply because it forms part of the hist. of our subject, but also because it forms a new era in the legis. for F. Soss. The Act seems as free from blundering as any in the Stat. Book. It is noticed that all the provisions regarding *Local Regis.* which were contained in the Bill of 1874 are expunged from the measure as finally passed. The new Act proceeds very much upon the lines of the former legis., but allows greater facilities to the Soss. for availing themselves of the law; and certainly has much greater safeguards against abuses generally, and fraud. The newer features we have indicated in *italics*. *Scot. and Ireland* are brought, very properly, under the control of the Chief Registrar.

In view of bringing the machinery of this new Act promptly into force, there was appointed by the Treasury an "Actuarial Commission," whose rep. and duties it will be more convenient to review on the completion of their labours, in 1876.

A publication called the *Accountant*—purporting to be the organ of the influential body whose name it bears—offered the following, perhaps not entirely disinterested, criticism upon this measure during its progress through Parl.:

Many difficulties and defects are undoubtedly removed by the Gov. Bill, and the Ministry deserve great credit for the attempt they have made to grapple with them. But it is precisely on the point of auditing that the Bill is at its weakest, and that permissive legis. appears at its worst. The system of providing that a thing shall be done in the right way, but that if people like they may do it in the wrong way, may be a very comfortable one for all those concerned, but is sure to prove disastrous in the long-run. Yet this hesitating style of law-making is exactly what we find in the Act. . . .

The provisions of the measure are then reviewed, and the writer proceeds:

However much these provisions may be an improvement on previous legis., it is impossible to consider them as satisfactory. The most mismanaged asso., or the most insolvent assu. co., could scarcely desire more than to have its valuations made by a nominee of the co., who need not be a man possessing the slightest knowledge of accounts. . . . A man who wants to ins. his life for £1000 can make his choice between perhaps a hundred rival estab.; a poor man's choice is more restricted. It is in the interest of the weak and feeble of the community that we ask that the work of auditing should be entrusted only to competent hands. Let the task be done by Gov. valuers and public auditors; or if too much supervision is objected to, let it be provided that the certificate of a public accountant shall alone be held as complying with the terms of the Act. . . .

No change, however, was made: the auditing clauses must be regarded as tentative.

While the preceding measure was passing through Parliament, the following Orders held their Annual Movable Conferences. These represented the interests of more than 900,000 members; and we may be fully assured that the provisions of the Bill received their earnest consideration. We give a few of the leading details of the Order in each case:

1. *Manchester Unity of Odd Fellows*. The approximate income for 1874 was stated at £625,023, of which £485,250 was from contributions by members, and £126,000

from interest; the payments out were, for sickness allowance, £305,595; for funeral benefits, £94,029; in all, £392,624, showing an estimated gain of £229,398, and raising the funds of the So. to £3,706,366. The number of members was nearly half a million. The various Lodges were becoming alive to the importance of dealing with the deficiencies which appeared at the last valuation. Three of the Lodges having a surplus had set the excellent example of voting sums in aid of those in a less fortunate position.

2. *Loyal Order of Ancient Shepherds*. It was reported that their members now numbered 60,517, an increase in the past year of 5572. There were also 26,538 widows and wives connected with the Inst. The financial statements were not complete, but the total property of the So. was stated to be £106,930.

3. *National Order of Independent Odd Fellows*, comprising 41,364 members. Here also statement of accounts had not been received from all the Lodges, though the committee were able to report the assets at £94,302.

4. *The Grand United Order of Odd Fellows*. In the two years the members had increased 15,749, and now amounted to 94,929. The contributions during the past were £95,048, and the payments out for various benefits £59,710; for expenses, £7614, leaving the So. with an accumulated capital of £430,000.

5. *Order of Druids*: reported strength at 58,882 members.

6. *Free Gardeners*: set forth a roll of 140,000 members. The contributions were £41,303, and the sickness and funeral expenses £36,389.

A Return obtained by Mr. Goschen "showing in respect of each year since 1865 inclusive the increase of the deficiency in the assets of the National Debt Commissioners, in respect of their liabilities to F. Sos., was laid before Parl. It showed that on the 20th of Nov. 1865, the deficiency was £844,505. In 1866 there was an increase in the deficiency of £35,945, but in 1867 there was a decrease of £8053. In each succeeding year there had been an increase of deficiency as follows: In 1868, £44,358; in 1869, £41,823; in 1870, £57,200; in 1871, £35,755; in 1872, £50,822; in 1873, £44,117; in 1874, £42,492. The total deficiency in 1874 was £1,188,964—the increase of deficiency since 1865 being £344,459.

The [20th] Ann. Rep. of Registrar of F. Sos. was issued. Mr. A. K. Stephenson, who had acted as Chief Regis. since the death of Mr. Tidd Pratt, having been appointed Sol. to the Treasury, Mr. J. M. Ludlow, Barrister-at-Law (of whom we have already spoken—see 1874), was appointed Chief Registrar on 27th Feb. this year. This Rep. contains an excellent synopsis of the new F. Sos. Law, showing wherein it differs from the previous measures. It will be remembered that the law, as a whole, was not to come into operation until the close of the present year. This Rep. therefore follows the old lines.

Among the 45 F. Sos. dissolved during the preceding year by agreement or award, were the following:

Poor Man's Club (Wing, Bucks); founded 1855; members 71; funds £140.

Bostock Dividend F. So. (Moulton, Cheshire); founded 1851; members 24; funds not stated.

Loyal United Plate, Crown and Sheet Glass Cutters F. (Blackfriars, Lond.); founded 1867; members 19; funds £165.

City of Lond. Mut. and Philanthropic Waiters F. (Lond.); founded 1868; members 30; funds £161.

Workers in Copper Burial So. (Houndsditch, Lond.); founded 1847; members 115; funds £375.

Newport and Pillgwenlly Stevedores Benefit (Newport, Mon.); founded 1872; members 35; funds not stated.

New F. Medical (Enstone, Oxford); founded 1869; members 48; funds not stated.

Railway Servants Sick So. (Shrewsbury); founded 1868; members 16; funds £50.

Thirteenth of May Club (Cannington, Somerset); founded 1810; members 86; funds £230.

Provident Gardeners F. (Longton, Stafford); founded 1856; members 32; funds not stated.

No. 2 Female Church Prov. (Coventry); founded 1845; members 12; funds £97.

Five of those Sos. had been founded between 1793 and 1828; 20 between 1829 and 1854; and 20 between 1855 and 1873. The number of members in these Sos. (as far as stated) amounted to 2442; the funds to £12,298. Insolvency was not the cause of dissolution in many cases. In 2 cases the Registrar refused to make award for dissolution; in one of these the So. was afterwards dissolved by agreement.

Among 33 Sos. dissolved, but of which notice only had been sent to the Registrar, were the following:

Mariners Union So. (Appledore, Devon); *West of Eng. Prov. Asso.* (Tavistock); *Kepier Grange Miners Accident Fund* (Durham); *Nut and Bolt Makers* F. (Oldham); *Humane Tontine Sick and Burial* (Liverpool); *Mut. Benefit So. of Workmen*, in employ of Messrs. Wicks, Bangs & Co., builders (Bow, Middlesex); *Civil Service Provident* So. (Charing Cross); *Amicable and Brotherly So. of Journeyman Machinists and Engineers*

(Southwark); *Independent Old Millers Unity F. So.* (Hull); *Hull Clerks and General Provident*.

In the specimens of Ann. Returns of F. Sos. obtained from various counties, is the following for *Durham* for 1874. To the question, "Whether the treasurer had given security?" 169 Sos. answered "Yes," and only 48 "No." To that "Whether the So. had a copy of F. Sos. Acts?" 86 answered "Yes," and 120 "No." The answers to the other questions are tabulated as follows:

Class of Sos.	No. of Sos.	No. of Members end of 1874.	Members Dying during the Year.	New Members joining during the Year.	Men. Withdrawn or Excluded during the Year.	No. of Members Sick.	No. of Days' Sickness.	Average days' Sickness to each Member of Sos.	Average days' Sickness to each Member Sick.
1. Local F. Sos.	18	17,778	26	154	118	460	17,808	10	39
2. Courts of <i>Foresters</i> and <i>Sanc-</i> <i>tuaries of Shepherds</i> having less than 100 members	21	1,170	13	138	129	306	8,991	8	29
3. Ditto having 100 or more members...	25	4,592	47	396	162	1080	34,085	7	32
4. Lodges of <i>Odd Fellows</i> of the various Orders having less than 70 members	31	1,248	8	210	192	272	6,435	5	24
5. Ditto having 70 or more members...	28	4,009	44	418	219	1075	35,795	9	33
6. Sos. of <i>Free Gardeners</i> having less than 70 members	22	899	10	161	92	220	7,542	8	34
7. Ditto having 70 or more members...	22	2,587	32	351	154	634	18,336	7	29
8. Branches of other Affiliated Orders	33	2,793	17	270	150	732	22,829	8	31
Total of Sick and Burial Sos.	200	19,076	197	2098	1216	4779	151,821	8	31'8
9. Sos. for <i>Burials</i> only—all but 1 being Female Sos.	19	2,845	86	167	104				
Total of Sos. of County of <i>Durham</i> answering Registrar's questions	219	21,921	283	2265	1320				

The forms sent out to the Sos. of this county were 734; 469 returns were received, of which 306 were in the form supplied by the Registrar; but the above 219 were all that could be used in the preceding T. The Registrar says hereon:

The number of Sos. in this county belonging to the more important Affiliated Orders—the *Foresters*, *Odd Fellows*, and *Gardeners*—is sufficient to admit of a comparison between groups of larger and smaller Sos. Contrary to the experience of the local *Gloucestershire* Sos., given in the Registrar's last Rep. (p. 21), the comparison in this case is, speaking generally as regards sickness experience, in favour of the smaller branches. The branches of *Free Gardeners* are an exception: but this is contributed to in some measure by the excessive sickness of one small So., which, with only 46 members, had 18 members sick, and 1032 days' sickness in the year; and by the unusual good fortune of one of the larger group, which, with 99 members, and 16 of those sick, was only called upon for 150 days' sick pay. The general result seems to indicate that a small So. may have some advantage, particularly in the duration of sickness, over a large one—prob. arising from the better personal acquaintance the members have with each other.

The following summary is designed to show this more clearly:

	No. of Sos.	No. of Members.	No. of Members Sick.	Total Days' Sickness.	Days' Sickness p. Member.	Days' Sickness p. Member Sick.
Sos. having less than 70 members	92	3,573	883	25,667	7'2	29'2
Sos. having 70 members or more	108	15,503	3896	126,154	8'1	32'4
Total	200	19,076	4779	151,821	8'0	31'8

The remainder of the Rep. is occupied with summaries of returns of F. Sos., and matters relating to Building Sos., Industrial Prov. Sos., etc.

In March of this year a local Committee of well-known county men was formed in *Bedfordshire*, the main object of which was to ascertain whether if any new F. So. for the county were estab., the existing Village Clubs could be absorbed into the new So. on such terms as would enable their members to secure in the new So. the "benefits" which they had anticipated in the old Clubs. Accordingly, detailed information was sought concerning the existing Village Clubs, and an actuary [Mr. Finlaison] was employed to assist the Committee. As the result of their investigations it was found that from 6 Clubs alone of various sizes, in different parts of the county, and founded at different dates, the County So. would require, upon taking them over, a single payment of more than £17,000—whereas the available assets of the 6 Clubs amounted to £6296 only! The Committee stated that "it should be understood that this valuation is not a valuation of the actual assets and liabilities of these Clubs, or their means of fulfilling the promises held out by their rules." The Committee had at the same time little or no doubt that the contributions to the existing Village Clubs are too low to secure the benefits promised.

Finding themselves unable to suggest a scheme by which the Village Clubs could be safely taken over by a County So., they next considered whether it was desirable on other grounds to attempt to form a new Benefit So. for the county; and arrived at the conclusion that it was not—vide *Rep. on F. Sos. for 1876*, p. 19.

Mr. E. W. Brabrook, Assistant Registrar of F. Sos., read before the Statistical So. a paper: *Friendly Sos. and Similar Inst.* [Journ. of Statistical So. vol. xxxviii. p. 185], wherein he lays down the following general principles:

1. That regis. should not be compulsory, if that can be avoided: but that the conditions of the law should be such as to induce every So. to come under it, and regis. thus be universal.

2. That the law should be comprehensive first, and eclectic afterwards.

3. That the general provisions of the law should be made applicable to Sos. rather with regard to the form of their organization than to its purpose.

There was much interesting statistical and historical detail embodied in this paper; but in a great measure drawn from sources which we have already passed in review. The following T., however, is not only original in its arrangement, but embodies information of the highest interest as to the proportions of the various classes of F. Sos. existing in the different counties of E. and W.:

F. Sos. of Various Classes in E. and W.—1873.

COUNTIES.	Sos. appearing on Regis. to which Returns were sent.	No. of Returns received.	Branches of Affiliated Orders.	Benefit Sos. generally [Local].	Burial Sos.	Annuity Sos.	Sos. of Females.	Amount of Funds where stated.	No. of Members where stated.
ENGLAND:									
Beds	225	114	56	53	—	—	3	£ 55,912	9,926
Berks	171	86	43	43	—	—	—	53,523	8,896
Bucks	186	92	41	51	—	—	2	70,052	9,261
Cambridge	199	110	64	46	—	—	—	58,208	11,307
Cheshire	674	399	302	57	26	—	14	258,250	92,036
Cornwall	232	101	55	45	—	—	1	75,090	10,546
Cumberland	152	89	74	9	6	—	—	58,672	12,898
Derby	602	363	259	76	7	—	21	190,436	38,181
Devon	501	250	112	109	6	8	15	413,182	33,139
Dorset	192	85	49	36	—	—	—	61,426	10,685
Durham	789	476	392	53	4	—	27	156,771	47,730
Essex	464	177	107	68	1	—	1	259,047	30,696
Gloucester	576	255	142	108	—	—	5	145,864	26,732
Hants	422	241	168	65	5	—	3	179,813	39,586
Hereford	72	34	22	10	—	—	2	32,313	3,421
Herts	210	85	37	46	—	—	2	139,552	11,903
Hunts	95	38	18	20	—	—	—	24,040	3,444
Kent	616	394	237	101	18	—	2	277,854	40,169
Lancaster	2790	1655	1000	539	87	—	29	1,383,466	485,344
Leicester	501	280	177	78	43	—	22	131,936	21,489
Lincoln	439	268	202	60	5	—	1	139,486	26,215
Middlesex	1345	858	550	294	11	—	3	1,011,376	151,096
Monmouth	554	217	167	39	3	—	8	83,184	17,055
Norfolk	584	258	159	88	10	—	1	173,952	26,296
Northampton	365	220	98	117	1	—	4	126,747	19,072
Northumberland	409	255	199	44	4	—	8	107,177	23,636
Nottingham	373	192	130	53	—	—	9	75,062	19,192
Oxford	183	97	26	71	—	—	—	42,374	6,931
Rutland	32	17	9	8	—	—	—	9,820	1,354
Salop	297	185	138	45	—	—	2	170,886	21,420
Somerset	467	150	84	62	—	—	4	115,882	13,099
Stafford	578	483	349	116	8	—	10	281,378	86,409
Suffolk	465	174	106	67	1	—	—	166,248	21,728
Surrey	709	435	317	108	5	—	5	248,685	51,240
Sussex	310	208	151	55	2	—	—	176,337	23,583
Warwick	585	269	159	96	3	—	11	346,662	77,311
Westmorland	44	31	29	2	—	—	—	31,466	3,957
Wilts	168	88	51	37	—	—	—	84,327	17,905
Worcester	438	208	126	74	—	—	8	121,467	20,668
York	1722	1070	847	191	15	—	17	725,555	132,033
Total	19,745	11,007	7288	3240	231	8	240	8,263,254	1,707,599

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WALES :								£	
Anglesey	19	6	2	4	—	—	—	2,095	176
Brecon	133	45	28	15	1	—	1	16,900	2,281
Cardigan	75	18	6	10	—	—	2	4,702	1,648
Carmarthen	171	102	55	45	1	—	1	42,924	9,018
Carnarvon	54	29	9	20	—	—	—	15,578	2,802
Denbigh	126	49	25	21	—	—	3	26,168	5,638
Flint	115	61	41	15	2	—	3	21,767	5,026
Glamorgan	1077	514	400	103	2	—	9	177,883	41,557
Merioneth	39	34	20	12	—	—	2	8,503	4,114
Montgomery	48	26	13	12	—	—	1	24,521	3,133
Pembroke	44	26	13	13	—	—	—	14,160	2,593
Radnor	13	9	3	6	—	—	—	12,070	1,706
Total	1914	919	615	276	6	—	22	367,271	79,692
England	19,745	11,007	7288	3240	231	8	240	8,263,254	1,707,599
Wales	1,914	919	615	276	6	—	22	376,271	79,692
Grand Total	21,659	11,926	7903	3516	237	8	262	8,630,525	1,787,291

Dealing only with the Sos. making returns—11,926, or just over one-half of the whole here shown, we see that *two-thirds* of these belong to the Affiliated Orders; the other third are of the class of County, District, and Village Sos. The relative proportion of members in the different classes of Sos. cannot be determined from this T. In other portions of this art. we have offered some obs. on this latter point.

By way of completing our Statistical Record of F. Sos., we present the following T. compiled mainly from the Ann. Rep. of the Registrar of F. Sos.; and to which reference more or less detailed has been made in the progress of this art.:

T. of leading facts in connexion with the progress of F. Sos. in E. and W., as drawn from the Ann. Reports of Regis. of F. Sos. and other sources, down to end of 1875.

Year.	Rules Examined and Certified.	Alterations of Rules.	Total Certificates.	Rules Deposited under Act of 1865 and subsequent Acts.	Notices of Dissolution.	No. of Forms for Ann. Returns sent out.	Estimated No. of Returns sent in filled up.
1793 to 1855	26,034	14,864	—	—	—	—	—
(From 23 July)							
1855	201	214	415	.....	.....	.....	.....
1856	830	832	1,662	81	.....	.....	.....
1857	822	899	1,721	.....	.....	.....	.....
1858	779	997	1,776	36	58	.....	.....
1859	956	1,045	2,001	59	52	.....	.....
1860	1,100	1,140	2,240	50	70	.....	.....
1861	1,288	1,182	2,470	25	112	.....	.....
1862	1,277	1,277	2,554	19	137	21,433	10,200
1863	1,054	1,231	2,285	23	118	.....	9,494
1864	1,056	1,352	2,408	44	120	22,511	10,398
1865	1,076	1,248	2,324	44	143	22,834	10,345
1866	1,176	1,487	2,663	43	130	23,407	10,678
1867	1,134	1,542	2,676	34	185	23,174	11,408
1868	1,112	1,327	2,439	44	139	22,026	12,263
1869	1,262	1,259	2,521	27	127	20,171	8,340
1870	998	1,274	2,272	20	118	20,436	8,505
1871	1,048	1,249	2,297	26	139	21,363	10,795
1872	1,665	1,621	3,286	20	94	21,819	12,267
1873	1,224	1,593	2,817	27	95	21,659	11,926
1874	994	1,334	2,328	22	78	21,547	11,490
1875	823	1,275	2,098	—	80	26,087	11,355
Before 1855	21,875	25,378					
	26,034	14,864					
Total	47,909	40,242		644	1995		

Mr. J. M. Ludlow, Barrister-at-Law, pub. a pamphlet: *On the Different Modes of State Aid to Private Undertakings*, and particularly to F. Sos. This paper forms one of the Appendixes to the 4th Rep. of the Royal Commission (1874).

Mr. W. J. Hancock, F.I.A., pub. in *Dublin*, a pamph.: *On the Temporary and Permanent Bus. of F. Sos.; with some Suggestions for making the latter secure through the Agency of the Post Office Savings Bank Department*; being the reprint of a paper read before the Statistical and Social Inquiry So. of Dublin; wherein is contained some suggestions of value, which will be reviewed in detail under GOV. INS. PROJECTS.

Mr. J. Curtis pub. a pamph.: *Is the Manchester Unity worth Preserving?*

Mr. J. Copeland pub. at Chelmsford: *State and Progress of the Essex Provident So.*

Dr. Hirsch pub. in Berlin: *Die gegenseitigen Hilfskassen und die Gesetzgebung—“Mutual F. Sos. and Legislation.”* This is a work of considerable merit, and will be spoken of in some detail under GERMANY, sub-heading F. Sos.

Australia.—There was printed by authority of the Gov. of *Victoria* (Australia): *Statistics of F. Sos. for the Year 1874, with Introductory Rep. by the Gov. Statist.* “Presented to both Houses of Parl. by His Excellency’s Command.” This Return contains much information of interest, most of which is condensed into the following T.:

F. Sos., Orders, etc., in Australia, 1875.

Name of F. So.	Number of Lodges, Courts, etc.			Per-centages.	
	Which furnished Complete Returns.	Incomplete or no Returns.	Total.	Complete Returns.	Incomplete or none.
Manchester Unity Independent O. of O. F.	154	—	154	100	—
Independent Order of Odd Fellows	27	14	41	66	34
Grand United Order of Odd Fellows	53	—	53	100	—
Ancient Order of Foresters	105	28	133	79	21
United Ancient Order of Druids	36	3	39	92	8
Independent Order of Rechabites	144	17	161	89	11
Sons of Temperance	61	3	64	95	5
Daughters of Temperance	8	2	10	80	20
Order of St. Andrew	—	26	26	—	100
Order of S. Andrew’s—Scottish Constitution	13	2	15	87	13
Melbourne St. Andrew’s So.	—	1	1	—	100
St. Patrick’s So.	3	5	8	38	62
Hibernian Australasian Catholic Benefit So.	19	38	57	33	67
Grand United Order of Free Gardeners	6	—	6	100	—
Protestant Alliance	1	22	23	4	96
Australian Natives Asso.	2	2	4	50	50
United Labourers	1	—	1	100	—
Melbourne and Hobson’s Bay United Rail-way Co.’s Servants Benefit So.	1	—	1	100	—
Wesleyan Local Preachers’ Asso.	1	—	1	100	—
German Sick and Relief Fund	1	—	1	100	—
Daylesford Seaman’s Mut. Benefit So.	1	—	1	100	—
St. Mary’s Total Abstinence Benefit So.	1	—	1	100	—
Independent Order of Shepherdesses	—	1	1	—	100
Ancient Order of Royal Foresters	—	7	7	—	100
Ancient Order of Shepherds	—	7	7	—	100
Victorian Independent Sick Benefit So.	—	1	1	—	100
Australasian United Order of Musicians	—	1	1	—	100
Independent Order of Shepherds	—	1	1	—	100
Total	638	181	819	78	22

Mr. H. Heylyn Hayter, the Gov. Statist., remarks hereon: Of the 819 Sos. or branches said to be in existence in the colony, 710 furnished returns of the number of their members—and these, at the end of 1874, were said to amount to 43,388. Estimating the same proportion of members to belong to the 109 branches which did not furnish Returns, as belonged to the 710 branches which did, it would follow that the members of all the Sos. amounted at that period to not less than 50,000.

Again: the Branches which furnished statements of their financial position, numbering 638, returned their aggregate income as £138,034; their expenditure as £122,428; and the amount to the credit of their funds as £266,073. Increasing these amounts by proportion, so as to apply to the 819 Branches known to exist, the following results are obtained: Income of F. Sos., 1874: £177,194; expenditure £157,161; amount to credit of funds £341,558. “It is a hopeful sign in connexion with F. Sos., that the statements

received, defective as they are, show that the moneys invested—for the most part at rates varying from 4 to 8 p.c.—increase steadily from year to year." The following being the amounts remaining at the end of the last 3 years: 1872, £188,690; 1873, £208,586; 1874, £225,217.

Taking the mean number of members during 1874 as being 42,664—of these 395 died; and 8262 sustained an aggregate of 45,964 weeks' sickness. (See 1871 and 1876.)

1876.—There was enacted 39 & 40 Vict. c. 32—*An Act to Amend the F. Sos. Act 1875*—which simply recites that it is "expedient to amend some points" in that measure, and accordingly it enacts as follows: This Act to be read as one with the Act of 1875. Regis. Sos. may by vote of three-fourths of members at a gen. meeting specially convened for the purpose become a branch of any other regis. So. No adv. or cancelment of registry to be necessary (s. 3). Regis. Sos. may contribute to the funds of other regis. Sos., or take part in their government, etc., by delegates or otherwise (4). Forms of acknowledgment of the regis. of branches to be the same as for Sos. All extra copies of certificates of births or deaths to be charged 6d. each (8). Notice of proceedings to set aside dissolution of So. to be sent to chief office not less than 7 days before any proceeding be taken (11). Several technical corrections of misprints, etc., are made.

The Poor Law Amendment Act of this year—39 & 40 Vict. c. 61—by sec. 23 enacts as follows:

... Where the Guardians incur any expense in the relief of a pauper lunatic, being a member of a Benefit or F. So., and as such entitled to receive any payment, they may recover from him as a debt, or from his exors., admors., or assigns in case of his death, the sum so expended by them as aforesaid; and the managing body of such So., after notice from the Clerk to the Guardians, served previously to the money being paid over, shall be required to pay the same to such Guardians, and shall be exonerated on payment thereof from any further liability.

This clause seems to have encountered a good deal of hostility on the part of members of some of the larger Orders, who appear to think that while the parish or union keep the man, his family should still receive the benefit from the F. So. Mr. Salt, M.P., the Parl. Sec. of the Local Gov. Board, received a deputation of *Foresters* on this question towards the close of this year. After hearing the statement of the deputation, he (Mr. Salt) replied as follows: The clause was introduced to remedy the grievance which arose in a case where a man was in the habit of getting drunk and becoming chargeable to the parish, and after being let out receiving his club money, with which he again got into such a state as to become an inmate of the workhouse; and this was really a great hardship upon the poorer class of ratepayers. He did not think the clause would apply to any other case, and he could assure them that if it operated generally in the way they had indicated, the Department would see that the grievance was remedied. (See 1878.)

The Chief Registrar of F. Sos. found it necessary, in bringing the Act of 1875 into operation, to make a new register for E. and W., confined to existing Sos. This fills no less than 74 fo. vols., being made up of detached half-sheets, one to each So., so that as soon as one becomes extinct, its half-sheet may be taken out and consigned to a register of extinct Sos. The compilation of this new register showed that the number of existing Sos. had been underestimated. In E. and W. there was believed to be at least 24,000, to which may be added about 2000 more for Scotland and Ireland.

There was printed by order of Parl.: *Copy of Treasury Minute, dated 7th day of April, 1876, respecting Reports from the Actuarial Commission appointed under F. Sos. Act of 1875, together with Copy of the First and Second, and of the Second Part of the Third of those Reports.* From this document we learn that a Treasury Minute of 17 Aug. 1875 had set forth that under the 10th sec. of the F. Sos. Act of 1875, it would be the duty of the Central Registry Office to "prepare and cause to be circulated, for the use of Sos., model forms of accounts, bal.-sheets, and valuations; and further to construct and pub. T. of payments and benefits for the use of Sos.," and "it being of the greatest importance that the model forms should be prepared under the best actuarial advice, the Chancellor of the Exchequer proposes that a small Commission should be appointed to draw them up." This Commission consisted of Mr. W. P. Pattison, Mr. R. P. Hardy, Mr. A. J. Finlaison, with Mr. A. B. Adlard as Sec. The Commission was instructed to consider and prepare the following forms:

1. Form of ann. return of receipts and expenditure, funds and effects, showing separately the expenditure in respect of the several objects of each So. to the 31st Dec. in every year, pursuant to sec. 14, sub-sec. *a*, of the F. Sos. Act, 1875.
2. A form of quinquennial return of sickness and mort. to be required from each So. for the 5 years ending 31 Dec. 1875 (sec. 14, sub-sec. *l*).
3. The form in which the abstract of a quinquennial valuation is to be made where a So. appoints its own valuer, and of the return to accompany such abstract (sec. 14, sub-sec. *h*).
4. A form of return to be furnished to the Registrar for the purpose of a quinquennial valuation (*Ibid*).
5. To consider whether any and what T. of sickness and mort. now extant may be recommended for temporary use by the Registrar, and with what modifications (if any) pending the preparation of T. under the new Act (sec. 10, sub-sec. 5 *c*).
6. To consider and prepare model forms of accounts, so far as such forms are affected by the forms for ann. and quinquennial returns.

The first Rep. of the Commission contains the following passages :

... In order, however, to test whether the actual working of these forms [those in use by several of the large Sos.] was attended by any practical difficulties, one of our number (Mr. Hardy) paid visit to the chief offices of the *Manchester Unity* (Manchester), the *Ancient Order of Foresters* (Edinburgh), and the *Royal Liver* (Liverpool), and personally inspected the records received by the large Sos. from their Branches, and filled up by them at their central offices.

The machinery by which these periodical returns were collected and enforced was fully explained. Mr. Hardy, who gathered that with the forms then in use (accompanied, as in the case of the *A. of Foresters*, by full explanatory notes) little difficulty was experienced in obtaining correctly filled-up returns. . . .

We have also prepared a Quinquennial Return of Sickness and Mort., designed to exhibit the fact in a shape that can be made readily available by the Registrar for combining the total experience of all, or a portion of the Sos., and with comparatively little trouble, and moderate expense to the department.

Provision has been made for distinguishing the time during which the full sickness allowance were drawn from that when half-pay was allowed, and from that of "reduced pay."

Although the risks against which F. Sos. were intended to provide cannot be accurately estimated without an elaborate investigation, which must embrace a variety of circumstances, such as occupation, social condition, and the tendency, more or less pronounced, of locality to particular diseases, we believe the facts called for in the returns will prove sufficient for a satisfactory practical inquiry and hereafter the scope of investigations may be easily extended, and a more minute subdivision of results be attained.

At present we do not recommend that more detailed returns should be enforced; but we think would be desirable for the Registrar to take an early opportunity of making collections of the experience of certain Sos. whose members belong to particular trades, and also to gather from various Sos. the experience of each in regard to special occupations. These can be combined in any manner which may appear desirable. . . .

When Sos. appoint their own valuer, we propose that he should be required to give the results of his valuation in a special Return, setting forth and illustrating the methods he has used, and showing the position of the So. as estimated by him, and his recommendations thereupon.

The forms it is not necessary to pass in review.

The Further (or 2nd) Rep. is dated 2nd January, 1876, and relates mainly to the fee to be paid to valuers and public auditors under the Act of 1875. A good deal of correspondence was had with various F. Sos., and also with the several Sos. of Accountants in England and Scotland, before any decision was arrived at. Finally the Commissioners recommended the following scale. To *Valuers*: for Sos. with 50 or any smaller number of members, £3 3s.; not exceeding 100 members, £5 5s.; and £1 1s. for each add. 10 members up to 1000; exceeding 1000 and up to 10,000, £14 14s. for first 1000 and £5 5s. for each additional 1000. To *Auditors*: for Sos. of not more than 100 members £1 1s.; over 100 but not exceeding 500, £1 1s. for each 100; with over 500 members £5 5s. and an add. 10s. 6d. for each 100 members; no fee, however, to exceed £52 10s. "unless by special arrangement." The Commissioners say hereon:

6. The scale of fees which we have recommended may possibly, in some quarters, be considered lower than is consistent with the requirements of an efficient audit. We therefore think it important that in the papers issued to Public Accountants and Sos. with respect to audit, attention should be particularly directed to the fact that the use of the "Contributions Received Book," the form for which was submitted to your Lordships with our First Rep., will materially diminish the work of audit.

The Third Rep. bears date 3 Feb. 1876, and contains the following important passages:

We are of opinion that pending the preparation of new T. under the Act of last session, T. of rate of contribution based upon Mr. Ratcliffe's T. of Sickness and Mort., deduced from the experience for the years 1866-70 of the *Manchester Unity of Odd Fellows*, Rural, Town, and City District combined, may be generally adopted, for benefits usually granted by F. Sos.

The Commissioners had calculated upon this basis a useful set of T. submitted with the Rep. and printed thereon. These we shall review under F. SOS., MORT. AND SICKNESS EXPERIENCE OF.

This year the first Rep. of the Chief Registrar of F. Sos., appointed under the Act of 1875, was presented to Parl. It was in 2 parts *fo.*, and on a much more comprehensive scale than any of the preceding Rep. It relates to all the varied classes of Provident Assos. placed under his supervision; but we shall here review only those portions relating to F. Sos. One significant fact is mentioned on the first page, viz. that more than 50 sets of rules, or amendments of rules, of F. Sos. had to be certified at the central office on the 31st Dec. 1875—the last day of the existence of the previous laws relating to F. Sos. The Registrar remarks:

The number of F. Sos. regis., it will be observed, was smaller than during the previous year, which itself was below the average. This may be accounted for by the fact that legis. was pending during both years—a cause which always checks the formation of new Sos. . . .

Among the 47 F. Sos. dissolved by agreement, and advertised in the *London Gazette* were the following:

Rickmansworth Benefit or Assu. So.; founded 1797; members 22; funds £2602.

Liverpool Ship Joiners F., founded 1846; members 30; funds £181.

Swiss and United Couriers So. (Lond.); founded 1870; members 15; funds not stated.

Pill F. So. (Easton-in-Gordino, Somerset); founded 1869; members 95; funds £1045.

Early Blossom Lodge F. (Shipley, Yorks); founded 1867; members 45; funds £650.

Doves Rest Lodge F. (Ripon, Yorks); founded ?; members 13; funds £37.

Lily of Avon Lodge, I. O. of Odd Women (Cwm Avon, Glamorgan); founded 1874; members 22; funds £38.

Again it is to be observed that insolvency was not the cause of dissolution in many cases. There were 4 Sos. dissolved under award of Registrar; and 29, of which notice was

sent to the Registrar through the post: among the latter were the following: *Wallasey Ore Yard Club* (Birkenhead); *Seaman's Loyal Standard Asso.* (S. Shields); *Bristol Cabmen's Prov. Fund*; *Royal Naval Seaman's Prov. So.* (Landport); *Peaceful Conqueror Union, Daughters of Temperance F. So.* (Manchester); *Amalgamated So. of Mechanics and Labourers* (Newport, Mon.); *Provident Miners Accident Sick* (Bywater, Yorks).

The total fees received in the Registry Office, "and paid into the Exchequer, amount now to nearly £600 a year."

A new purpose to which the F. Sos. Acts may be applied was permitted by the Treasury, May, 1876, as follows: "To create funds by monthly or other subs., to be lent out to, or invested for, the members of a So. for their benefit."

There are several para. relating to the recommendations of the Actuarial Commission, whose Rep. we have already passed under review. "It was with great regret that the Chief Regis., in preparing the returns for which . . . he is responsible, found himself unable to adopt, without modification, the forms recommended for the purpose by the Commissioners," etc.

We are glad to note the following under "Working of the Act"—after mention made of several minor points in the details of the measure had been misunderstood—"On the whole, however, the Act appears to have been not unwillingly received, nor unintelligently carried out, by the bulk of the Sos.":

The Chief Registrar is of opinion that the new machinery for payments on death of children, created by sec. 28 of the Act, has been very beneficial. Very great good, he also considers, has been done by the provisions for a more stringent audit; by the requirement of uniform forms of returns; and by the appointment of public auditors. There is clear evidence from various quarters and in various ways that Sos. are paying much greater attention to their accounts, and in many cases calling in the help of public accountants, when not of public auditors. The public auditors themselves, through the steps which they have taken to make their appointments known to the Sos., by advertisements or by printed circulars, are bringing home to the Sos. their obligations in the way of audits and returns, as they never have been brought home to them before. And although these officers are in nowise responsible to the Registry Office, the correspondence between it and them is beginning to be extensive. If in one or two instances, perhaps, these gentlemen may have been inclined to stretch unduly their authority, or to expect too much from that of the Registrars, on the whole the C. R. is disposed to rate very highly the value of the new element which they introduce into F. So. administration, and would be glad to see it extended throughout the country.

But the C. R. cannot help saying that the views of those who deemed the provisions of the Act too indulgent towards Sos. have not so far been justified by experience. Whilst the correspondence of the office has greatly increased, there has been unquestionably a great falling off in the number of applications by new Sos., and in the number of rules which having been returned with corrections by the office, have been sent up finally for registry. No doubt the general depression of trade and industry has had much to say to the decrease in the number of new Sos. formed, which is not confined to the number of F. Sos. But nothing has been more common than for F. Sos. to send in applications for registry, with the heads relating to Quinquennial Returns, Valuations, and the right of members to demand an Investigation of Affairs struck out. The same has taken place with applications for complete amendments of rules; and in both cases it has frequently happened that when the omissions were supplied, the rules failed eventually to reach the point of registry. The number of applications for registry is, however, now decidedly increasing as compared with the earlier months of the year.

The falling off of the number of the new Sos. was no doubt (the Rep. proceeds to state) in a great measure caused by the difficulties "which unfortunately arose in the application of the Act to that class of bodies to which it was intended to be more especially beneficial, viz. the Affiliated Orders: such difficulties, however, being owing, the C. R. ventures to think, far less to the Act itself than to the necessities of a transition from an older system to a newer one. It continues:

To understand these difficulties, it must be borne in mind that whilst the Affiliated Orders claim to be single Federated Sos., and often bear the title of "Unities" (*Manchester Unity of Odd Fellows*, etc., etc.), the now repealed Act of 1855, as carried out by the Registrar of F. Sos., never recognized this constitution. Sec. 49 of that Act, bearing that the word So. should "extend to and include any Branch of a So. by whatever name it may be designated," taken in conjunction with other secs. of the Act, was held by them to mean that a Lodge or Court separately regis. had absolute power so to alter its rules and to change its name, as to cast off all dependence on the Order. And although words were allowed to be inserted in the rules of Lodges or Courts, to the effect that the objects and rules of the Lodge, etc., should be carried into effect "in conformity with and subject to the general rules" of the Order, and the rules of the particular District to which such Lodge belonged—sometimes in terms more express still as to the binding effect of the Order and District rules—such provisions were virtually ignored at the Registrar's office, no reference ever being made in respect of any amendment of rules or other proceeding of a Lodge or Court, to the General or District rules, for the purpose of ascertaining whether such proceeding was in conformity with them.

It is obvious that such a position—created it must be observed at the instance of the Orders themselves—was an essentially false one for them. Their so-called Branches were allowed to be in apparent subordination to the Order, whilst they are really independent of it. They seemed fast: they were loose. The moral tie between them had no legal validity.

To meet some of the difficulties here indicated, the F. Sos. Amendment Act, 1876, was enacted. It is added:

Before quitting this part of the subject, the C. R. may observe that the difficulties which have attended the attempt to adapt the law to the peculiar constitution of the Affiliated Orders would all have been obviated if the provisions for permissive incorp. contained in the orig. Bill of 1874 had not been objected to by one of those bodies. Under the corp. form not the slightest difficulty would have existed in recognizing the separate personalities of the Order, the District, the Lodge or Court, and yet in allowing the latter to be members of the former. It is the absence of individuality involved in the form of representation by trustees which has been the great obstacle to the legal recognition of the peculiar organization of these great bodies.

The C. R. feels, however, confident that when once the friction of transition has ceased, the machinery of the new Acts will be found far better adapted than that supplied by any previous legis.

to the sound development of those organizations, which exercise so large an influence on the well-being of our working and lower middle classes.

It is, indeed, too soon to venture an opinion as to what may be termed the attractive power of the new Acts. But if they really improve the condition of about 26,000 existing bodies, place them on a firmer footing, render them more worthy of support, it may confidently be predicted that *in the course of a few years any temporary falling off in the creation of new Sos. will be amply made up for.*

Finally, the C. R. makes, we believe, a well-merited acknowledgment of the benefits resulting at this juncture from the large practical experience of the Chancellor of the Exchequer (Sir Stafford Northcote), and the attention "which, in the midst of graver cares still, he had been able to bestow upon the matter." "The task of carrying the new Act into operation must have been an arduous one in any case: but for the above circumstance, the C. R. would almost have felt it a hopeless one." We, as an independent outside observer, may add that the experience obtained by the C. R. as Sec. of the Royal Commission, as also his literary skill in bringing all the more prominent points arising in the working of the Act into harmonious relation, are doing much to aid the F. Sos. of the U.K. in commencing a new, and we trust brighter era.

The Reports of the Assistant Registrars for *Scot. and Ireland* are (for the first time) appended, and although meagre of details, do aid in the understanding of the position of F. Sos. in the entire kingdom.

Part II. of this Rep., which appeared at a later period, embodied an attempt of a most laudable character, which may be best detailed in the following "memorandum" by the C. R.:

No complete list of existing regis. F. Sos. has ever been pub., as has been done in the case of Industrial and Prov. Sos., Building Sos. under the Act of 1874, and Trade Unions under the Act of 1871. Apart from the interest attaching to such a list in itself, its pub. has become virtually a matter of necessity, since the passing of the Act of 1875, owing to the frequent applications to Registrars of F. Sos. from Public Auditors and Registrars of Deaths, for copies of the list in whole or in part, and to their still more frequent inquiries as to the status of particular Sos. It had been the desire of the C. R. to pub. such a list entire in the present part, but it was found impossible to do so within any reasonable limits of time. It has therefore been deemed advisable to terminate such complete list on the present occasion with *Lancashire*, reserving the remaining counties for next year.

It is clear that one of the chief values of such a list would be its completeness up to a given period, on a uniform plan. As this could not be accomplished, we must be content with what is presented. From this instalment we have endeavoured to prepare an abstract of the different classes of F. Sos. prevailing in the various counties of Eng., by way of enlargement of the T. which we have quoted from Mr. Brabrook, under date 1875. After several weeks of labour, it became clear that this could not be made reasonably complete, and it is therefore (for the present at least) abandoned. An additional reason for not using the abstract prepared is furnished in the footnote on p. 9 of Rep. for 1876 (pub. 1877). The fact of these inaccuracies had become apparent as we proceeded. We fear they may extend to such portions of the summaries as we have used; and the late issue of Part II. for 1876 prevents comparison and correction.

In the sifting of some 30,000, perhaps of the 44,000, F. Sos. which have been regis. in E. and W., we have noted the following among numerous Sos. having quaint titles, or possessing other remarkable features. It is clear that the list cannot be exhaustive (even if such had been the design), because the data from which it is drawn was itself incomplete.

F. Sos. in E. and W. with quaint titles, or other noticeable features, incidentally compiled from Part II. of the Rep. of the Chief Registrar of F. Sos. for 1875.

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
				£
1794	F. and Charitable So. of Gentlemen, Farmers, Tradesmen, and Labourers (Gt. Longstone, Derby)	1875	—	—
1795	Virtuous Woman So. (Warrington).....	"	—	—
1796	Joseph-and-His-Brethren Lodge 296 U. A. O. D. (Ticknell, Derby).....	"	105	502
1800	Backbone F. So. (St. Helens, Lanc.).....	"	24	281
1802	Kent Union (East Grimstead) [Funds equal to £230 p. member!].....	"	60	13,844
1805	Angelic So. of Women (Haslingden).....	"	—	—
1806	John Wiclif Lodge Loyal Orangemen (Harton Collieries, Durham).....	"	64	54
1812	Tent of Righteousness F. So. (Equestrian Tavern, Blackfriars Road).....	"	44	407
1813	Ancient Brazen Lodge F. So. of Linlithgow.....	"	—	—
"	Faith, Hope and Charity F. So. (Gosport).....	"	98	1274
1814	Brockton Queen Dowager F. (Salop).....	"	67	854
"	True Sons of Equity F. So. (Aldersgate St., Lond.)	"	48	439
1823	Eboracum Lodge [Odd Fellows] (Keighley, Yorks)	"	208	5727
1827	Loyal Redemption Lodge [Odd F.] (Marsden).....	"	295	2101

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1827	Weavers Glory Lodge [Odd F.] (Skelmanthorpe)....	1875	353	2641
1828	Foundation Stone of Truth So. (Grasscroft, Yorks)	"	124	252
1829	Hero's Glory Lodge [Odd Fellows] (Halifax)	"	130	1140
1830	Aaron's Budding Rod Lodge [Odd F.] (Halifax)	"	134	256
"	Court Joseph and Benjamin [Foresters] (Lower Cumberworth, Yorks)	"	158	737
"	Loyal Jolly Sailors Lodge [Odd Fellows] (Leeds)....	"	215	770
"	Prudence of the Vale Lodge (Todmorden)	"	187	1779
"	Well of Salvation Lodge [O. F.] (Kirkburton, Yorks)	"	266	2026
1831	Court Diana and Stag [Foresters] (Shepley, Yorks)	"	130	1575
"	Loyal Bugle-man Lodge [Odd F.] (Slaidburn, Yorks)	"	176	1009
"	Offspring-of-Love Lodge [Odd Fellows] (Ashton-under-Lyne)	"	87	203
1832	Alfred the Great Lodge [Odd Fellows] (Leeds)	"	146	258
"	Archangel [Odd Fellows] (Tadcaster)	"	99	235
"	Audlem Innocents (Audlem, Cheshire)	"	—	—
"	Court Stone Eyel [Foresters], Leeds	"	100	1413
"	Journeymen's Pride Lodge [Odd Fellows] (Southowram, Yorks)	"	67	534
"	King Edward Third Lodge [Druids] (Woodhouse, near Leeds)....	"	339	4907
"	Lily-on-the-Hill F. (Gt. Gomersal, Yorks)	"	101	1237
"	Loyal Mount Ararat Widows and Orphans [Odd Fellows] (Trowbridge)	"	207	713
1833	Aaron-the-High-Priest Lodge [O. F.] (Wyke, Yorks)	"	101	1286
"	Court George-of-the-Green [Foresters] (Wakefield)	"	11	110
"	Fountain of Knowledge Lodge [Odd Fellows] (Grenoside, Yorks)	"	223	2645
"	Hereditary F. (Iconshaw Cowling, Yorks)	"	157	1080
"	Rock of Hope Lodge (Thornton, Yorks)	"	199	2818
"	Yorkshire Delight So. (Sheepbridge)	"	—	—
"	Youths Resolution Lodge [Odd Fellows] (Mount Tabor, Yorks)	"	101	1035
1834	Court Cain and Abel [Foresters]	"	121	238
"	Court Firramenta [Odd Fellows] (Bradford, Yorks)	"	61	98
"	Court Mesopotamia [Foresters] (Accrington, Lanc.)	"	263	1461
"	Loyal Tree of Life Lodge [Odd Fellows] (Shipley)	"	267	1799
"	Court Paradise Regained [Foresters] (Keighley, Yks)	"	92	1231
"	Cæsar Phoenix Senate [Anc. Ord. of Romans] (Leeds)	"	70	56
"	Court Ram's Horn [Foresters] (Denholm, Yorks)....	"	130	1491
"	Court Three Marys [Foresters] (Halifax, Yorks)	"	88	347
"	Faith Hope and Charity Lodge [Odd F.] (Bradford)	"	315	3068
"	Mineral Spring Lodge [Odd Fellows] (Harrowgate)	"	233	1202
"	Poor Man's Guardian Lodge [Shepherds] (Normanton)	"	258	900
"	Sweet Home Lodge [Odd F.] (Bradford Moor, Yorks)	"	139	1231
1835	A-Friend-to-the-Benighted-Traveller Lodge (Halifax, Yorks)	"	216	2034
"	Britons Glory Lodge (Hunslet, Leeds)	"	6	20
"	Court Three Virtues [Odd Fellows] (Malt Shovel Inn, Baildon, Yorks)	"	188	2656
"	Loyal Byron Lodge [Odd F.] (Pocklington, Yorks)	"	104	1415
"	Peace Lodge [Odd Fellows] (Halifax)	"	101	998
1836	Court Child-of-the-Forest [Odd Fellows] (Borough-bridge, Yorks)	"	216	1086
"	Court Success-to-the-Salt-Trade [A. O. F.] (Winsford, Cheshire)	"	196	1061
"	Loyal Laurel and Crown Lodge F. So. (Ashbourne)	"	105	680
"	Court Red Rover [Foresters] (Tadcaster)	"	45	928
1837	Land of Goshen Lodge (Aberford, Yorks)	"	112	207
1838	Butterfly Sick and Burial (Liverpool)	"	—	—
"	Loyal Brougham and Vaux Lodge (Wakefield)	"	33	77
"	Midsummer F. So. of Women (Heworth, Durham)	"	—	—
"	Mystery of Providence Lodge [Odd F.] (Grantham)	"	125	1983
1840	Court Victoria's Choice [Foresters] (Stainforth, Yks)	"	159	356
"	Children of Israel Lodge [Odd Fellows] (Thongs-bridge, Yorks)	"	61	555

Year of Etab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1840	Faithful Endeavor Lodge [O. F.] (Sandhutton, Yorks)	1875	148	£ 531
"	Jacob's Well Lodge [Shepherds] (Scarborough)	"	169	366
"	Liverpool Catholic Sick and Burial So. of Mercy	"	—	—
"	Loyal Friend-to-All Lodge of O. F. (Worthen, Salop)	"	279	3190
"	Pleasant Retreat Lodge [O. F.] (Kingston-on-Hull)	"	294	1937
"	Ploughboys' Refuge Lodge [Odd Fellows] (Bishop Burton, Yorks)	"	56	1074
"	Sons-of-the-Thames Benefit So. (Lond.)	"	94	256
"	Spring of Providence Lodge [Odd F.] (Tenbury)	"	100	1855
1841	Blooming Rose of Standwick Lodge [Free Gardeners] (Aldborough, Yorks)	"	64	486
"	Court Hark to Bounty [Foresters] (Slaidburn, Clithero, Yorks)	"	38	1006
"	Court Well Meant [Foresters] (Mortomley, Yorks)	"	144	250
"	Loyal Rose of England [Druids] (Liverpool)	"	—	—
1842	British Queen Improvement Lodge of Odd Females (Chowbent, Manchester)	"	55	112
"	Pineapple Lodge [Gardeners] (Sheepcar, Yorks)	"	31	60
"	Weary-Man's-Rest Lodge (Wakefield)	"	86	231
1843	Free-and-Easy-John's So. (Pit-hill, Durham)	"	69	313
"	Guide-to-Happiness Lodge [Odd Fellows] (East Harling, Norfolk)	"	105	1084
"	Isaac's Son Lodge [Shepherds] (Leeds)	"	136	120
"	Yorkshireman's Glory Lodge [Odd Fellows] (Bailiffe Bridge, Yorks)	"	108	379
1844	Old-Oak-at-Home [Odd Fellows] (Wakefield)	"	56	104
"	Poor Mans Friend Lodge [Odd Fellows] (Warley, Halifax, Yorks)	"	121	691
"	Saints Peter and Paul Tontine (Dublin)	"	45	5
"	Tree of Liberty Lodge (Old Swinford, Worcester)	"	83	582
1846	Arcturus Lodge Benevolent Sick Fund (Weedon)	"	49	196
"	Come Freely Lodge [Odd Fellows] (Mixenden, Yks)	"	136	1361
"	Fruits-of-Perseverance Female	"	269	1029
1847	Invincible Female So. (Blyth, Northumberland)	"	138	287
"	Shepherds-on-the-Turff (Newmarket)	"	75	416
"	Who-Could-Have-Thought-It Lodge [Odd Fellows] (Halifax, Yorks)	"	51	464
1848	Jonadab Perseverance Tent [Rechabites] (Sheffield)	"	43	433
"	Welcome Visitor Lodge [Odd F.] (Todmorden, Yrks)	"	133	1064
1849	Star of Temperance So. (Brewers Arms, Chapel-town, Yorks)	"	58	83
"	Wellesbourne Chain-of-Friendship (Warwick)	"	50	344
"	Yorkshire-Rose-in-the-Centre Lodge [Odd Fellows] (Halifax, Yorks)	"	93	746
1850	Daisy-in-the-Field Lodge (Holbeck, Leeds)	"	87	42
"	Goodmans Senate [Ancient Order of Romans] (Leeds)	"	115	226
"	Health and Unity Senate [Ancient Order of Romans] (Leeds)	"	54	123
"	Independent Man-of-War So. (Elland, near Leeds)	"	59	549
"	Submit-to-Providence Lodge [Odd Fellows] (Scaris-brick, Lanc.)	"	100	520
1851	Caractacus Senate [Ancient Order of Romans] (Clifford, near Tadcaster, Yorks)	"	57	47
1853	Court Moonlight of Standish [For.] (Standish, Lanc.)	"	—	—
"	Temple of Truth So. (Higham, Derby)	"	79	360
1854	Court Fruitful Vine [Odd F.] (Attercliffe, Yorks)	"	289	812
"	Live-and-Let-Live F. So. (Leicester)	"	73	122
"	Sanctuary Industry [Shepherds] (Sheffield)	"	19	39
"	Sanctuary Pride-of-Bispham [Shepherds] (Billinge, Wigan)	"	—	—
1855	Wings of Friendship Benevolent (Northampton)	"	37	72
1856	Botanical Rose-of-Sharon [Gardeners] (Leigh, Lanc.)	"	—	—
"	Sacred Band of Lovers-of-Justice-and-Peace (L'pool)	"	57	208
"	St. Mary the Virgin's Lodge [Odd Fell.] ("Shoulder of Mutton" Inn, Oxenhope, Yorks)	"	85	620
1857	Court Good-Will-to-Man [Odd Fellows] (Beccles)	"	140	802

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1857	Court Music [Foresters] (Wakefield)	1875	77	£ 32
"	Court United-we-Stand [For.] (Sowerby Bridge, Yks)	"	83	364
"	Welcome Home Lodge (Liverpool)	"	39	366
1858	Bradford District Arch Chapter of Titus Cæsar [Odd Fellows]	"	146	681
"	Hill-Against-a-Dale F. (Gildersome, Yorks)	"	48	67
"	Standard-of-Freedom Lodge (Halifax)	"	78	325
1859	Blooming-Dahlia-of-Flora-Cottage [U.O.F.G.] (Darlington)	"	—	—
"	Club Faith No. 1. Hon. Order of Engineers Sick and Benefit F. (Oldbury)	"	59	220
"	Loyal Mounted Sword Cutlers I.O.O.F., M.U. (Shotley Bridge, Durham)	"	89	1455
"	Mountain Top F. (Ripponden, near Halifax)	"	39	106
"	Court William Rufus [Foresters] (York)	"	78	188
"	Saltaire Tower-of-Refuge So. (Shipley, Yorks)	"	120	426
1860	Blessed Paul-of-the-Cross Tontine (Dublin)	"	43	6
"	Bud of Hope [Free Gardeners] (Spennymoor, Durh.)	"	93	68
"	Court Musicians Glory [Foresters] (Halifax)	"	56	71
"	Loyal Knights of St. John Evening-Star Camp (Rotherham)	"	130	118
"	Second Sober Sons of Emerald Isles (Liverpool)	"	63	3
"	Who-Would-Have-Thought-It Sick So. (Brierley Hall, Stafford)	"	35	164
1861	Court Cæsar's Camp (Knaphill, Surrey)	"	75	346
"	Court March-of-Intellect [For.] (Northowram, Yorks)	"	72	251
"	Flower-of-the-Flock F. (Pit-hill, Durham)	"	194	368
"	Independent Total Abstinence Sisters-of-Progress (New Cut, Lambeth)	"	67	117
"	Rhododendron F. (Riccall, Yorks)	"	74	426
"	Shepherds Rising-on-the-Hill Lodge [Shepherds] (Haydock, St. Helens)	"	—	—
"	United F. So. of Female For. (Middleton, Lanc.)	"	—	—
"	Young King Charles Sick Burial (Liverpool)	"	—	—
1862	A-Good-Beginning-Looks-Well Lodge [O. Fellows] (Accrington)	"	—	—
"	Early Primrose F. [Order of Golden Fleece] (Bradford, Yorks)	"	85	240
"	Loyal Offspring-of-St.-Peter's Lodge [Odd Fellows] (Warmfield, Yorks)	"	24	179
"	Moenstroke Little-Thought-of F. So. (Hampshire)	"	—	—
"	Sir Robert Peel's Chapter I. Mercantile Order of Fellow Citizens (Morley, near Leeds)	"	46	113
1863	Bunch of Roses Lodge [Odd F.] (Bradford, Yorks)	"	39	43
"	Faversham Glory Lodge (Newton, Yorks)	"	51	170
"	Oxnobbe Lodge [Druids] (Bolton)	"	61	129
"	Rose of Denmark So. (Huddersfield)	"	103	321
"	Shepherds-in-Prosperity So. (Tunstall, Stafford)	"	103	296
1864	Court Sons-of-the-True-British-Tar (Ardwich, Lanc.)	"	—	—
"	Immaculate Tontine Mort. (Wexford)	"	—	—
"	Nelson's Hope Lodge [Druids] (Yorks)	"	114	230
"	North Pole Sick and Burial (Liverpool)	"	—	—
"	Sanctuary Faithful Abraham [For.] (Abram, Lanc.)	"	—	—
1865	Good Encouragement So. (Pudsey)	"	32	106
"	Loyal Glory-of-the-Globe Lodge (Tottington Higher End, Lanc.)	"	106	247
"	Mistletoe F. (Hebden Bridge, Yorks)	"	105	308
"	Multum-in-Parvo So. (Liverpool)	"	103	86
1866	Grand Master's Council (Derby)	"	36	66
"	Prince-Howell-the-Good Merthyr Unity (Blenavon)	"	133	936
"	Rising Sons Division [Sons of Temperance] (Shipley, Yorks)	"	41	86
"	Thames Tunnel F. (Bermondsey)	"	54	62
1867	Hand-of-Providence Lodge [Odd Fellows] "Cross Daggers" Inn, Rotherham)	"	75	263
"	Pentecost Protestant Benefit (Liverpool)	"	—	—

Year of Estab.	Name and Location of Society.	Date of Return quoted.	No. of Members.	Funds in Hand.
1867	Violet of Eden (Amble, Northumberland)	1875	199	£ 272
1868	Balm Ing Lodge [Odd Fellows] (Liversedge, Yorks)	"	39	41
"	Court Rambler [Odd Fellows]. (The So. is composed of Soldiers, and is usually held where the Regiment is quartered—sometimes out of the U.K.) [See text 1875]	"	—	—
"	Gold Diggers Pride (Peckham)	"	23	13
"	Pull-together-Boys [Odd F.] (Bradmore, Staffords)	"	24	—
"	Pure Water Division [Sons of Temperance] (Leyland, Lanc.)	"	42	105
"	Sons of Judah (Lond.)	"	67	94
1869	Ancient - Sons - of - Adam - and - the - Old - Original-Ploughmen (Milnrow, Lanc.)	"	177	1369
"	Certain-to-Prosper Lodge [Odd Fellows] (Accrington)	"	—	—
"	Loyal Son-of-Redemption Lodge (Slaithwaite, Yorks)	"	58	79
"	The Cestrian Tontine (Chester)	"	73	242
"	Live-and-Let-Live So. (Willenhall, Stafford)	"	60	150
"	Pulling-together, or Firemen's and Tradesmen's F. (Ebbw Vale)	"	69	9
"	Tree-of-Life Lodge [Ancient Free Gardeners] (South Shields)	"	110	134
1870	Highland Laddie Lodge [O.F.] (Cleckheaton, Yorks)	"	57	301
"	Mundella's Pride Lodge (Rawmarsh, Yorks)	"	56	45
"	Nil-Desperandum Sick Benefit (Lingfield, Surrey)	"	57	103
"	Prairie Flower Lodge [Gardeners] (Middlesboro')	"	20	26
"	Tower of David Lodge (Knottingley)	"	70	92
1871	England's Glory F. (Lawley Bank, Salop)	"	24	2
"	Fair Maids of Taunton Deane [Shepherdesses, Bristol Unity] (Somerset)	"	54	32
"	Golden-Rule Lodge [Gardeners] (Wombwell, Barnsley)	"	158	295
"	Miss Nightingale Lodge [Druids] (Littlemore, Yorks)	"	37	66
"	Pride-of-Oak Miners Benevolent So. (Dudley)	"	51	109
"	Sanctuary Dropping Well [Shepherds] (Knaresbro')	"	40	28
"	The Loyal Laurel-Leaf F. (Mileham)	"	57	207
1872	Onward Lodge [Foresters] (South Stockton, Yorks)	"	33	46
"	Faithful Bee Lodge [Odd Fellows] (Shipley, Yorks)	"	39	61
"	Secret-of-England's-Greatness Protestant Benefit So. (Liverpool)	"	—	—
"	Shepherds-on-the-Rhine Lodge [Shepherdesses] (Kingston-on-Hull)	"	41	29
"	Star-of-Faith Division [Sons of Temperance] (Southwick, Durham)	"	—	—
1873	Child-of-Hale Sick and Burial Tontine (Liverpool)	"	42	114
"	Go-Forward-and-Prosper [Modern Masons] (Worsley, Stafford)	"	25	19
"	Royal Stag F. (Liverpool)	"	—	—
"	So. for Helping-each-other-in-the-Funeral-Expenses-of-Each-Respective-Family (Brierly Hill, Staffordsh.)	"	42	7
1874	Flower of Hindley Shepherds So. (Lanc.)	"	42	134
"	Halewood Hand-of-Charity F. Sick & Burial (Lanc.)	"	34	8
"	Lady Lawson Union, Daughter of Temperance (Middlesborough)	"	84	1
"	Nil-Disperandum Tent [Imperial Order of Romans] (Guisborough, Yorks)	"	52	37
"	Rising Bud Lodge (Bradford, Yorks)	"	40	7
"	Vine-and-Fig-Tree Lodge [Odd Fellows] (Oldbury)	"	36	18
1875	Dingle Crusaders Good Templars Mut. Ben. (L'pool)	"	—	—
"	Finger-Post Burial (St. Helens)	"	—	—
"	Happy-Homes-of-Bingley Female [Romans] (Bingley, Yorks)	"	62	86
"	Help-your-Neighbour F. So. (Liverpool)	"	—	—
"	Hope-of-Bingley Juvenile So. (Yorks)	"	29	—
"	Thistle-Nest-of-Airdale Tent (Bingley, Yorks)	"	213	834
"	United Buffalo Sick and Funeral (Southwark)	"	72	19
—	Dobcross Linnean F. (Yorks)	"	20	5

In conjunction with these may be read the titles of many of the F. Sos. which have been dissolved during the last twenty years, of which we have given an abstract in the preceding pages.

It remains to be stated that of 26,087 forms of Returns sent out from the Registry Office for E. and W. to be filled up for the past year, but 11,355 were received: these purported to represent 2,960,489 members, with funds of £8,665,049. Those for *Wales* (included in the foregoing) were 925 Sos., with 146,904 members, and £397,325 funds; but some add. would require to be made for Returns sent in late, and with imperfect addresses, etc. — of which for the whole of E. and W. there were no less than 1267, embracing 67,855 members, with funds of £297,729—all of which are included in the figures first given in this para. In *Scotland*, out of 835 forms sent out, there were received 441 Returns, embracing 543,551 members, with funds of £548,805. In *Ireland*, out of 470 forms sent out, 318 Returns were received, embracing 72,029 members, with funds of £123,021; but of these, 201 Returns, embracing 62,213 members, with funds of £49,780, were from the County and City of *Dublin*.

During the summer of this year there was an exchange of International civilities between the members of a number of French F. Sos. in Boulogne and those of Folkestone and Hythe Odd Fellows, Druids, and other Orders. These latter first paid a visit to Boulogne, and on Whit Monday about 1000 members of the Société de Bienfaisance, la Loge l'Amitié (Freemasons), Société l'Union, Société Musicale, Société l'Orphéon, Société de l'Emulation, Nautique; Société la Lyre Boulonnaise; Société la Fourmie, Société de Secours Mutuels des Ouvriers, Société l'Union des Travailleurs, Société des Sapeurs-Pompiers, Société de Secours Mutuels de la Maison Pourre, Gillott, O'Kelly & Co.; Fanfare Boulonnaise, Délégation des Impruneurs de Boulogne, paid the return visit. Steamers were lent by the South-Eastern Railway Co. for the purpose.

Mr. Henry F. A. Davis, Solicitor, pub.: *The Law and Practice of F. Sos. and Trades Unions*. The author introduces his work with a general review of the hist. and present condition of the law and practice relating to F. Sos., and then in his first chap. treats of the proceedings prior to regis. and the formation of F. Sos. The succeeding chapters discuss the management of Sos., their property and powers, the rights and liabilities of members, and the dissolution of the Sos. A similar mode of treatment is applied in the second book to Trades Unions. The work is alike unpretending and meritorious.

Mr. Hugh Barclay, LL.D., Sheriff-Substitute at Perth, pub. in Glasgow: *The F. Sos. Act (1875), with Introduction: containing a Summary of the Commissioners' Rep. (1874), and the Proceedings in Parl., with Notes on the Clauses*. This is an exceedingly useful pub., done better than books of this class usually are.

A series of most excellently written papers was commenced in Sept. of this year in the *Baltimore Underwriter*, by "W. S. L.," on "Industrial Ins." Wherein (*inter alia*) F. Sos., Gilds, and kindred asso. are learnedly treated of. We have availed ourselves of these, and hereby render our acknowledgments.

Australia.—There was this year appointed in the Colony of *Victoria* a Royal Commission "to inquire into the working of the F. Sos. Statute." From the minutes of evidence and appendixes it appears that the system pursued hitherto in the Colony in respect to F. Sos. has been singularly cumbrous and expensive. There have been three separate elements in the registry of every So.: certification of rules, at a fee of £3, by a certifying Barrister; certification of T. by a certifying actuary, whose fee is not fixed by stat.; and registration, at a fee of 10s., by a Regis. whose office is purely honorary. *The actuary's certificate is made compulsory in all cases*, and this requirement appears to have produced such a deadlock that in the course of about a year and a half the present actuary had only certified one So. out of 10 that had applied to him. Sos. in process of incorp. have to go through the twofold process of "Provisional" and "Complete Regis." Returns are required from estab. Sos., but there is no machinery for enforcing these. The recommendations of the Commissioners embrace many features analogous to those embodied in the F. Sos. Act, 1875—but there is a departure in several important points. All new Sos. are to be required to regis., and the payment of fees is to continue; but all provisions as to granting annu. and endowments are to be excluded from the Act. The certification of all rules by an actuary appears intended to remain. Periodical valuations to be compulsory; but the Gov. is to undertake the work for a small fee, the So. supplying the data. Audits not compulsory, but Regis. may direct audit on application of 10 members. The funds of insolvent or seceding branches to be trans. to parent So. There are other points of Gov. interference which would be resented in the mother-country.

1877.—The Rep. of the Chief Registrar of F. Sos. issued this year had the interest of being the first since the F. Sos. Act, 1875, had come into full operation. Its contents relate to the year 1876. The number of new F. Sos. regis. during that year (treating 223 branches as Sos.) was 341—being a smaller number than that of which we have any previous record. The number of "amendments" of rules regis. was 931, being also considerably below the average of the last 15 years. The C. R. says:

The first F. So. which rendered a complete amendment of its rules under the new Act—thereby accepting its provisions as a whole—was the *Hulme F. Burial So.* (Lancashire). It was not till

the 1st April that the first new So. was regis.—the *Eye Medical Club* (Suffolk); and this was not followed till the 24th by the 2nd—the *Salesbury School F. So.* (Lancashire). Thus the list of Sos. regis. during the year represents those of 9 months only. It was not till the 26 May that the first *Branches* were regis. as such—those of the *United Patriots*, a Gen. So., which, on the occasion of a complete amendment of its rules, converted itself into a *So. with branches*. The first separate So. which converted itself into a Branch, and the only one before the passing of the F. Sos. Amendment Act, 1876, was a Lodge of the *Norfolk and Norwich Unity of Odd Fellows* (regis. 28th July). . . .

The fact that the diminution in the number of new Sos. regis. extended to all 3 leading groups of Sos.—Sos. under the F. Sos. Acts, Building Sos. and Co-operative Sos.—seems to show that one general cause was at work, viz., as indicated in the last Rep., the general depression of trade and industry. To the other causes of the diminution, also referred to in that Rep., as bearing upon F. Sos.—the greater stringency of the new system, and the difficulties which arose in carrying out the Act of 1875 in respect of the Affiliated Orders—the C. R. need not revert. It is already certain that the year 1877 will show a considerable advance on its predecessor. . . .

The C. R. observes with respect to the future, that however largely the F. Sos. Acts may be resorted to, "the number of separate Sos. newly regis. is certain to fall short of the apparent totals of former days, when Branches had not been distinguished legally from Sos." And since the Federal type of So. is largely extending in comparison with the individual, "it will be to the number of Branches regis., and not of Sos., that the statistic and politician will have to look more and more for an index to the development of F. Sos." (p. 4.)

Some "new and substituted regulations and forms," having for their object the facilitating the operations of the new Acts, had been issued.

"Special authorities" had been given for founding Sos. with the following objects: 1. "Assisting members out of employment." 2. "Protecting and defending members of any lawful trade or calling, against frivolous, vexatious, or malicious prosecutions; and in cases of robbery and other crimes, affording them legal or other assistance for the detection and prosecution of the offenders." 3. "Promoting agriculture or horticulture." 4. "Promoting temperance and economy, by taking small deposits." These were all granted in 1877. The special authority of 1876 (as to loans) "continues to be largely made use of by Loan Sos. in Ireland."

The appointment of Mr. Wm. Sutton (late of the *London and Provincial Law Assu.*) as *Actuary* to the Central Office, in pursuance of sec. 10, sub-sec. 3, of F. Sos. Act, 1875, is several times referred to in the Rep., as marking "a very important step in the hist. of the F. So. system in this country." Several specific duties are assigned to the Actuary under the provisions of that measure, especially the accepting from the Sos. the materials for valuation, and causing their assets and liabilities to be valued and reported on. But the C. R. says:

Over and above these stat. functions, however, the Actuary's assistance has been found extremely valuable in framing forms of Returns; adapting them to particular groups of Sos.; giving advice to Sos. as to their forms of accounts; scrutinizing the returns of particular Sos., etc. He serves as the natural medium of communication between the Registry Office and the public valuers, and all letters bearing upon actuarial subjects are naturally referred to him. So valuable indeed is his help, and so well does it fit in with the work of the office, that it would be a matter of wonder how it should ever have done without him, had it not been for the fortuitous circumstance that the Assistant Registrar for Eng. had been himself trained orig. for the actuarial profession, and had thus been able to supply aid in matters lying altogether beyond his statutory qualifications as a Barrister.

The appointment of *Public Auditors* is not referred to, but of these we shall speak separately.

Regarding the *Ann. Returns*, we are told that it was during 1876 that the first attempt was made to obtain these in a fixed form, "instead of allowing the Sos. the option of sending in anything they pleased in the shape of a copy of the last Ann. Rep."—as was permitted by the Act of 1855. The total number of Returns received in E. and W. was 11,282, embracing a total of 3,404,187 members, with funds of £9,336,948.

Part II. of the present Rep. containing detailed items of the Returns, is not yet out of the printer's hands: but Part I. furnishes us with some details of the results. Thus, 22 Sos. return over 10,000 members each, and the following over 30,000 each:

Royal Liver F. (Liverpool)	682,371 members.
United Assu. So. (Liverpool)	159,957 "
Blackburn Philanthropic Burial So.	111,665 "
Royal London F.	94,103 "
Hearts of Oak Benefit	64,421 "
Liverpool Protective Burial	54,065 "
Loyal Philanthropic F. (Liverpool)	43,000 "
Burslem Mut. Burial	40,867 "
Rational Sick and Burial (Manchester)	32,387 "

With the exception of the 5th and the last, these Sos. belong to the class known as *Collecting Burial Sos.*—"and their membership is known to consist very largely of infants." The aggregate membership of the 22 Sos. (each having more than 10,000 members) amounts to 1,478,765, or not far from one-half of the total returned—leaving 1,925,422 members for the 11,260 other Sos. with less than 10,000 members—giving an average of close upon 171 members each. "From all this will be seen (says the C. R.) how small the bulk of our F. Sos. really are in point of membership" (p. 10).

Now, if we turn to *Funds* instead of *Members*, a different state of things presents itself. No less than 58 Sos. return more than £10,000 each—in all, £2,283,346, representing not much more than a quarter of the total funds; and leaving £7,053,602 for the re-

maining 11,224 Sols., or nearly £628 each. Of the 58, no less than 18 return over £30,000 each, viz.:

Royal Liver (Liverpool)	£453,418
Hearts of Oak Benefit (London)	179,995
Liverpool Victoria Legal	123,035
Royal Standard Benefit (London)	100,729
Mutual Prov. Alliance (London)	83,741
So. for the Benefit of the Widows and Orphans of the Hospital and Regimental Staff of H.M. Army (London, S.E.)	79,719
Essex Provident So. (Chelmsford)	77,845
Cannon Street Male Adult Prov. Inst. (Birmingham)	66,780
Western Provident Inst. (Exeter)	65,557
Rational Sick and Burial Asso. (Manchester)	55,555
Hampshire F. So. (Winchester)	53,730
Western Annu. So. (Exeter)	48,160
Stoke and Melford Union Asso. (Suffolk)	41,137
London Docks F. Inst. (London)	40,654
Birmingham Gen. Provident and Benevolent	37,997
Widow and Orphan's Fund (Brighton)	36,657
Brighton and Sussex Mut. Prov. (Brighton)	35,752
United Assu. So. (Liverpool)	31,218

Here there are but 3—the first, third, and last—Collecting Burial Sols.; the remainder being F. Sols. The *Royal Liver*, it is seen, heads both lists. Out of 9 Sols. in the first list, *Lancashire* claimed 6; out of 18 Sols. in the last list, but 4 belong to that County. The C. R. says:

If we attempted from the above data to estimate the membership and funds of the 14,805 Sols. which have failed to make Returns, it would be very unsafe to take either the average of membership or funds of the Sols. with less than 10,000 members or £10,000 funds as a basis. The great bulk of the larger Sols., and especially of the richer ones, having prob. made returns, it would hardly be prudent to suppose an average of more than 65 members and 30s. funds a head—or say, in round numbers, £98. This would give an add. of 962,325 members, making in all 4,366,512 members, and £1,450,800 funds—making in all £10,787,839. A deduction must, however, be made from the membership for persons who are members of two or more Sols. at once—as of several Burial Sols., or of a Burial So. and an Affiliated Order, or of two Affiliated Orders, or of an Affiliated Order and a Dividing So. Perhaps 10 p.c. might be deducted on this amount, leaving still over 3,900,000 members.

Since the above figures apply only to regis. Sols., it appears prob. that the estimate given some years since by the F. Sols. Commissioners [4th Rep. (1874) para. 55] of over 4,000,000 of persons members of F. Sols. regis. and unregis., with £11,000,000 funds, was *decidedly under the mark*.

In a few cases in which, after notice, the So. persisted in not filling up the form, prosecutions were instituted, and convictions obtained. We are glad to see the C. R. is continuing this course. For Sols. to *pretend compliance* with the Act, but to ignore that part of its requirements from which good can result, is a mere mockery. The effect of such proceedings in increasing the labour of the department, and destroying, or at least seriously delaying its utility, is shown in the following para. of the present Rep.:

The requirement, moreover, of Returns in a specified form involved for the first time an individual examination of each Return received, to see if it complied with the prescriptions of the law. This task, however, proved one which the resources of the office . . . proved inadequate to fulfil. *The Returns were found to be so imperfectly filled up that it was impossible to reduce them to any satisfactory degree of correctness.* Of those received, even after many of them had been sent back for correction, less than two-thirds prob. are in proper form. In a vast number of cases no attempt was made to fill up the inner pages of the sheet, containing the amounts of receipts and payments for benefits and management; but only the front page, stating the names of trustees, number of members, etc. In some instances it is candidly stated that the accounts have not been audited. In hundreds and hundreds of cases again, notwithstanding the printing at the foot of the Return of the provisions of the stat. requiring the signature either of one public auditor, or of two auditors appointed according to the rules, the Return has been sent in without any auditors' names, or without any auditors' signatures, or else signed by a single person as auditor.

The C. R. is convinced that until proper accounts are kept by F. Sols., and can be tested by the proper filling up of Returns, *no sensible progress can be made in their management*. He hopes, therefore, that for the next few years he will be able to make this his main object. The conditions for so doing, it appears to him, are three: First, the liberal diffusion of information upon the subject; second, a sufficient staff at the Registry Office to carry out the full work of examination, and of correspondence with the Sols. for the amendment of the Returns; third, the systematic prosecution of Sols. which refuse or do not care to fulfil the requirements of the law.

He very properly adds that the importance, from the point of view of a true social science, of the regular publication of really accurate figures as to the growth of F. Sols., can hardly be exaggerated. "No others can afford so great a test of the progress of the working classes in material prosperity, as well as in provident habits." But imperfect Returns are entirely misleading.

In answer to various complaints made of the complexity of the forms issued—made by way of excuse for shortcomings—it is stated in a footnote (p. 12) that "a Lodge of the *Norfolk and Norwich Unity of Odd Fellows*, with a blacksmith for treasurer, and a mole catcher and a hawk for auditors, sent in a Return which, though frequently mis-spelt, was filled up with perfect correctness from beginning to end."

We next reach the important question of the *Quinquennial Returns of Sickness and Mort.* The forms for the period 1871-5 were issued in 1876, and the total number

received for the 3 kingdoms was 10,008—being a larger number than on any previous occasion. In 1865 the totals for E. and W. were 7706, in 1870 the reduced number of 7467. Thus, after allowing for *Scot.* and *Ireland*, something like 2000 more Soss. had responded. The Rep. proceeds:

... As the Quinquennial Return has always been made on a special form, this increase indicates a real progress in the efficient carrying out of the law. It is true to say that out of the 10,008 Returns, a large number will be found to be practically of very little value, in consequence of being imperfectly or incorrectly drawn up. It was scarcely to be expected that it would be otherwise; and it may be added that very few indeed of the Returns from Soss. having more than 1000 members, purporting to be drawn upon the principle recommended by the Actuarial Commission—*of grouping the numbers according to years of birth*—can be said to be trustworthy; indeed the greater portion are *prima facie* inaccurate. In the case of those large Soss., who have furnished apparently correct Returns in this form, it has transpired that professional assistance has generally been found necessary before the Act could be complied with. *Another point calling for notice in reference to this class of Returns is, that no information can be gathered from them as to the occupations of the members.*

As an illustration of the sort of errors committed, the most common is that of putting down particulars of those only who had died or received sick pay in the 5 years, although express instructions to the contrary are put at the top of the sheets, viz., "List of all the members and other persons who have been assured for sick pay during the 5 years, whether they have been sick or not, and where they have been sick, the duration of sickness experienced by each." Another common error is the insertion of the names, etc., of those who had joined during the 5 years specified in the Returns, to the exclusion of all the previously existing members. Many Returns are imperfect on account of the omission of the members' ages; while the particulars as to members' wives and children are, as a rule, very imperfect. Yet on the whole "it may be said that the requirements as to the Quinquennial Returns have been very fairly complied with." (p. 14.) A considerable number of Soss. had made excellent Returns.

The C. R. very properly states that a point which will require careful consideration, when dealing with the particulars of sickness, is "the varying practice of Soss. as to the payment of sickness allowance for terms of less than a complete week—some Soss. counting 7 days to the week, and others only counting 6," and he adds:

One of the most important matters as to which information is required is the duration of attacks of sickness: because in nearly all Soss. the full sickness allowance only lasts for a certain length of time, and then, in the event of the member being still sick, the amount of sickness allowance is reduced; and it becomes necessary, therefore, in making a valuation of a So.'s assets and liabilities, that the valuer should be in a position to make an estimate not only for the number of weeks' sickness that may be expected p. member on the average, but also of the effect of such sickness upon the So.'s financial position. Whether the present Quinquennial Returns will furnish any trustworthy information on this point cannot be stated until they have been submitted to a very careful examination.

It is for reasons such as those referred to in the last two para. that the sickness experienced by F. Soss. can never entirely resemble the true law of sickness, as deduced from observations wherein the duration of each attack is observed upon through its natural course. This aspect of the question will be considered more particularly under F. Soss., MORT. AND SICKNESS EXPERIENCE OF.

The next topic of the Rep. is "*Valuations: the Public Valuers.*" After a well-merited acknowledgment of the important services rendered to F. Soss. by the late Mr. Henry Ratcliffe, the C. R. calls attention to the steps which are being taken by Committees of local gentlemen in several of the counties of E. and W. in view of securing proper valuations for the Local Soss. In the County of *Montgomery* the rules of the Committee give it authority as follows: 1. To pay or contribute to the expenses of valuation by an actuary approved by the Sub-Committee. 2. To pub. information as to the objects and work of the Committee, and as to the rights and duties of F. Soss. under the present law. 3. To recommend for local assistance any new F. So. or Medical Club whose rules have been approved by the Sub-Committee, or any F. So. which shall have been valued by and have adopted the recommendations of some actuary approved by the Sub-Committee. It would be difficult to devise a more effective means of conferring permanent benefits upon Local F. Soss.

It is reported that 8 Soss. had complied with the Act by making Returns in required form of valuations of their assets and liabilities. "A number of other Soss. also sent in particulars of valuations made, but as the same were not in such form as to comply with the Act, they had to be returned for correction." One other valuation made by an actuary (since deceased) was tendered but rejected. The correspondence pub. is a painful incident in connexion with this Rep.; but the department must see that there is a substantial compliance with the law, irrespective of persons. Of the 8 valuations accepted, 6 were made by well-known professional actuaries; one by an accountant, and another by a schoolmaster.

The details of these valuations are pub. in the Rep., and will of necessity afford valuable aid in other cases. The C. R. says hereon:

It will be seen, on reference to the valuations, that there is something more required of a competent valuer than mere computing by the aid of T. *The special features of the So. must be carefully considered from various points of view, before the principles and data to be used in the valuation can be properly determined upon.* Among the many points to be regarded are the following:—1. The nature of the So.'s investments, and the rate of int. they yield. 2. The nature of the So.'s Sickness and Mort. Experience. 3. The financial effect of reducing the sick-pay in cases of prolonged sickness. 4. The financial effect of sickness allowance throughout life. 5. The number of members in the So.; that is, whether the number is large enough to justify the expectation of average results.

Again, when the principles and data to be used have been carefully chosen, and the results of the valuation ascertained, there arise other important questions as to which the valuer ought to be able to give the So. information, advice, and assistance. The valuer should be competent, for instance—1. To give a satisfactory explanation of the cause of the surplus or deficiency shown by the valuation. 2. To advise as to how such surplus or deficiency should be dealt with. 3. To fix the principles on which such surplus should be divided or such deficiency made good.

The next subject touched upon is the important one—"Working of the Acts." This we regard as having an especial interest. The C. R. says: "If new Sos. are still chary of registering under the Act of 1875, the various new provisions introduced by it are daily being tested by existing Sos." In proof, two of the Lodges of a leading Affiliated Order had set in motion the powers given under sec. 23 for the appointment of inspectors to examine into the affairs of a So., and report thereon; and other applications were pending. Applications had also been made under sec. 16, which gives the Central Office authority to prosecute in cases of fraud. Again, an application had been made, and a conviction obtained under sec. 25, relating to illegal transfer of business: two officers of the *United Family Life Assu. and Sick Benefit So.* (Birmingham) were sentenced to 14 days' imprisonment for aiding and abetting an illegal transfer of the bus. of the So. to the *British Workman Assu. Co. Lim.* Applications for dispensing with consents to amalg., etc., under sec. 2, sub-sec. k, had been made. *Branches* had been regis. by many of the large Orders, and others of the Orders were taking steps in this direction. Several "Dividing Sos." had regis. under the Act; and questions had arisen under sec. 30, as to lapsing of benefits under "Collecting Sos." pol. without notice to members.

The powers given under sec. 25 regarding "Dissolution of F. Sos." are reviewed in some detail, as important questions are arising under them. Points as to "Certificate of Deaths" in connexion with the ins. of children continued to crop up, rather with Registrars of Deaths, than with the members of F. Sos. The operation of the Poor Law Amendment Act of 1876 as to F. Sos. benefits (in 1876) had given rise alike to doubts in practice. The progress of F. Sos. in the *Colonies*, and also legislation for F. Sos. in *Germany* [see GERMANY], bring to a close that portion of this valuable Rep. which relates more exclusively to F. Sos.

Early this year there was issued "Instructions to Public Valuers appointed by the Treasury under the F. Sos. Act, 1875." These instructions are 20 in number, and had been prepared with evident care. We have seen in our review of this Act, that all Sos. coming within its scope are henceforth required to make a return yearly of the state of their accounts for the preceding year; and at least every 5 years a valuation of their assets and liabilities. The gentlemen appointed public valuers are bound to undertake personally, or through other qualified valuers, every valuation under the Act tendered to them by F. Sos. Public valuers will not be ranked as public servants, and will have no salaries, nor any claim to pension or gratuity, holding their appointments from year to year, and at the discretion of the Treasury. A scale of fees has been laid down (although lower can be charged), and will remain in force till the year 1880, as follows: "For Sos. of not more than 75 members, £3 3s.; ditto 75 members and not exceeding 100, £4 4s.; ditto 100 and not exceeding 150, £5 5s.; ditto 150 and not exceeding 250, £6 6s.; ditto 200 and not exceeding 300, £7 7s.; ditto 300 and not exceeding 400, £8 8s.; ditto 400 and not exceeding 500, £9 9s.; ditto 500 and not exceeding 600, £10 10s.; ditto 600 and not exceeding 750, £12 12s.; ditto 750 and not exceeding 1000, £15 15s.; with a further £5 5s. for every 500 members, or portion thereof, beyond the total amount of members not exceeding 2500. Beyond 2500 members the fee to be a matter of special arrangement, as well as in all cases where the number of benefits exceeds that above mentioned." These fees are very moderate, considering the labour and responsibility involved in the valuation. The gentlemen who had accepted the position (and they were not to exceed 14, according to the 1st regulation) were, for *England*: Mr. M. N. Adler; Mr. C. Ansell, jun.; Mr. R. P. Hardy; Mr. W. Hatton (Brighton); Mr. W. L. Newman (York); Mr. W. P. Pattison; Mr. H. Ratcliffe (since dead); Mr. H. Ambrose Smith; Mr. T. Y. Strachan (Newcastle-upon-Tyne). For *Scotland*: Mr. J. Meikle; Mr. C. Prentice. For *Ireland*: Mr. H. Engelbach; Mr. W. J. Hancock. These may all be regarded as very competent men.

Mr. F. G. P. Neison read before the Statistical So. of Lond. a paper: *Some Statistics of the Affiliated Orders of F. Sos. (Odd Fellows and Foresters)* [*Journ. of Statistical So.*, vol. xl. p. 42]. From this paper we have already quoted in our outline of these two Orders. The paper is full of details of the highest interest, which the author's professional position has enabled him to acquire; and all who desire to understand the growth of the leading Affiliated Orders in this country have here the materials ready to hand.

1878.—Early this year about 200 delegates, consisting of the central committee of the United National Congress of Friendly and Affiliated Sos., and representing an aggregate, it was stated, of over two millions of members, held a sitting in Liverpool under the presidency of Mr. Henry Liversage, of the *Royal Liver So.*, for the purpose of considering the various legislative grievances under which such Sos. labour. With reference to the application of provident funds towards the maintenance of pauper lunatics and persons

who during life had received parochial relief (under the powers of the Act of 1876) the following resolution was passed :

That any legislative enactment which empowers Boards of Guardians throughout the kingdom to apply to F. Sos. for payment of ins. money due on the death of a deceased member to be appropriated to such member during his life should be repealed for the following among other reasons :—1. Because it strikes at the very existence of F. Sos. by discouraging the poorer classes from becoming members. 2. As a necessary consequence it tends to increase pauperism and the poor-rates, which F. Sos. have admittedly helped to diminish. 3. It is exceptional if not class legislation, inasmuch as no similar power is given to Poor-Law Guardians to lay their hands upon ins. or other companies. 4. It gives to the Guardians an unjust priority over the other creditors of the deceased by making the So. instead of the representatives of the deceased liable.

The issuing of blank forms of death certificates was also condemned, and a resolution passed declaring that the practice now existing of registrars distributing blank forms of certificates to agents and collectors of F. Sos. is highly reprehensible, as opening the door to fraud by offering a temptation to such agents and collectors, and that it is the duty of the Reg.-Gen. to at once cause such practices to be discontinued. A motion calling for the repeal or the amendment of the section of the F. Sos. Act relating to notices given to members who are in arrear before they shall incur forfeiture of benefit, led to a long debate as to whether it was judicious to re-open the whole question of F. So. legislation, as this would do ; and before a decision was reached the conference adjourned.

Postscript.—In the course of the preparation of this art. the following historical facts were omitted from their proper places.

1687.—This year was estab. in Bethnal Green the *So. of Parisians*, now known as the *Friendly Benefit So.*, meeting at the Norfolk Arms, William Street, Hart's Lane, E. In 1872 it had 61 members, and funds £1215. It is one of the early Protestant Refugee Sos. Among the names of its members are still to be found : Ferry, Handchard, Pomroy, Peltron, Mignot, Dongray, Lamy, etc. *Vide* Hon. Mr. Stanley's Rep. 1874, p. 132. The F. Sos. Commissioners in their 4th Rep. 1874 (p. lvi) say :

These centenary patriarchs of the East End appear all to belong to a remarkable group, founded by French Protestant Refugees, and which are supposed by many persons (*although the view does not appear correct*) to have been the earliest F. Sos. in this country. Their prosperity may be conjectured to be mainly due to their being somewhat in the nature of Family Inst., the members knowing and understanding one another : and being impressed with a common spirit and a sort of hereditary type.

1763.—The *Defoe F. So.*, founded this year, is one of the Protestant Refugee Sos. of which we have already spoken. In 1872 the So. had 64 members, with funds in hand of £570. The ann. income was about £56, and the cost of man. £4 7s., or under 8 p.c. Among the names of the members are : Bouchard, Fletcher, Agombar, Guerrier, Malivoire. *Vide* Mr. Stanley's Rep. 1874, p. 132.

1809.—There was this year founded the *Friendly Union Benefit So.*, Bermondsey. Among the peculiar features of the So. are the following : While membership is not actually limited to persons professing religion, a strict scrutiny is exercised as to moral character, etc. Again, a candidate must have been vaccinated, or have had the smallpox, must be perfect in limb, under 30 years of age ; and there is in add. a long list of excluded trades, ending with, "or any other bus. the So. may deem injurious to health." Then again careful inquiry is made as to ordinary earnings of persons seeking membership. Further, the *entrance fee* is graduated, not according to age, *but according to the funds of the So.*—5s. for every £100 of stock ; thus each member purchases himself into the partnership. The contribution is uniform. The number of members was orig. limited to 100, but afterwards extended to 130. In 1872 there were but 50 members, the funds being £2034. The sickness experience has been carefully recorded, as also the occupations of the members. Hatters, carpenters, and shoemakers had formed 27 p.c. of the members—70 out of 225. The So. is now working itself out quietly.

1849.—By the 12 & 13 Vict. c. 106—*An Act to Amend and Consolidate the Laws relating to Bankrupts*—it is enacted (sec. 167) that if the bankrupt be an officer, and have moneys and effects belonging to any F. So., the Court is to order payment thereof before any of his other debts are satisfied.

We have to make the following acknowledgments : To Mr. W. E. Brabrook, Assist. Registrar of F. Sos., for supplying us with various dates and documents ; to Mr. F. G. P. Neison, for some references to the extended literature associated with F. Sos. ; to Mr. R. P. Hardy, for aid in several useful forms.

[BENEFIT SOS.] [BENEVOLENT ASSO.] [BOX SOS.] [BURIAL CLUBS.] [CONTRIBUTION INS. ASSO.] [COW CLUBS.] [FAMILY INS.] [FUNERALS.] [GILDS.] [GOVERNMENT INS.] [HEALTH INS.] [INDUSTRIAL INS.] [INS. FRAUDS.] [LIFE INS.] [MINERS.] [NOMINATION POL.] [OCCUPATIONS.] [OLD AGE.] [PENNY SOS.] [PENSION SOS.] [PIG INS. CLUBS.] [POOR, THE.] [PROVIDENT ASSO.] [SAVINGS BANKS.] [SICKNESS.] [TONTINES.] [WIDOWS FUNDS.]

END OF VOL. IV.



